La responsabilité sociale de l'entreprise : enjeux, stratégies, impacts

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La responsabilité sociale des entreprises

"It is easy to dodge our responsibilities, but we cannot dodge the consequences of dodging our responsibilities."[1] Josiah Charles Stamp

1. "Il est facile d'esquiver nos responsabilités, mais nous ne pouvons pas esquiver les conséquences de l'esquive de nos responsabilités."

1.1 Introduction

La RSE, Responsabilité Sociale des Entreprises, ou *Corporate Social Responsibility* en anglais. Une expression très en vogue, aux contours flous, aux enjeux forts. Instrumentalisée, peut-être parfois galvaudée, ses définitions varient. Les termes s'y rapportant changent avec les modes de communication, de *business ethics*, *corporate governance* à ESG pour Environnement, Social, Gouvernance, aujourd'hui considérés comme les trois grands piliers de la RSE [2].

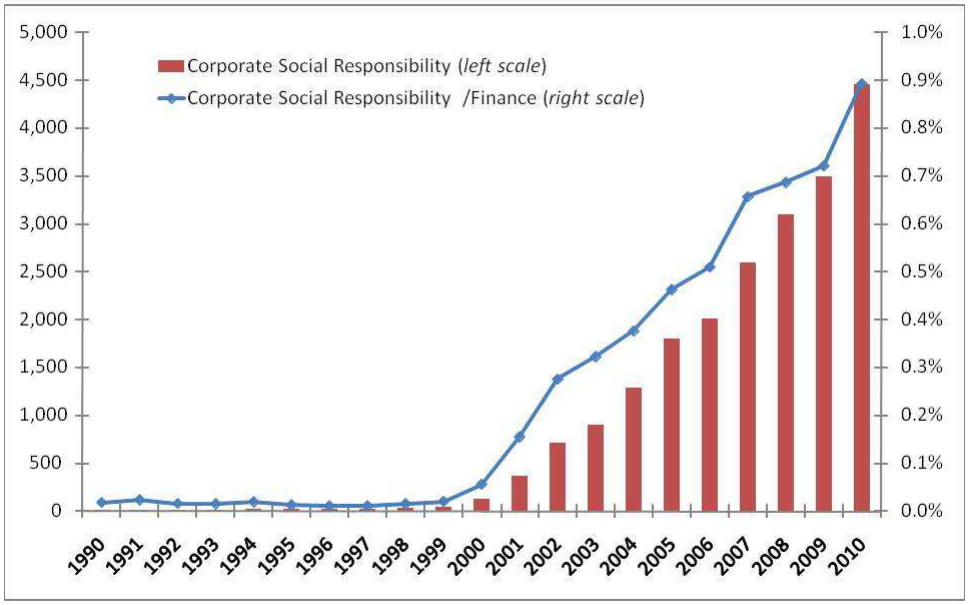


FIGURE 1.1 – **La RSE dans les médias.** Nombre d'occurrences du mot "corporate social responsibility" dans les journaux (axe de gauche), et celui-ci divisé par le nombre d'occurrences du mot "finance" (échelle de droite). Les requêtes ont été effectuées sur Dow Jones Factiva.

"La responsabilité sociale des entreprises est de faire des profits. L'entreprise moderne n'a pas de responsabilité sociale envers le public, ses seules responsabilités sociales sont les revenus fiduciaires qu'elle procure à ses propriétaires. Le travail d'un dirigeant est de faire de l'argent, d'atteindre ou de battre l'indice de référence du marché."

Cette citation de Milton Friedman, parue dans *The New York Times Magazine* le 13 septembre 1970, est un point de départ classique mais intéressant pour penser la RSE. Dans cette

2. voir Carrol, 1999, et De Bakker et al. 2005 pour une analyse historique des champs d'étude académique de la RSE

lecture, à laquelle souscrit une part importante des personnes diplômées d'université faisant partie du premier quartile de revenus (voir figure 1.2), les intérêts des actionnaires doivent clairement être distingués de ceux des parties-prenantes (clients, salariés, collectivités, propriétaires / investisseurs, pouvoirs publics, fournisseurs et concurrents). Michael Jensen (2002), l'un des pionniers de la finance d'entreprise, justifie cette théorie actionnariale par l'impossibilité de maximiser plusieurs paramètres simultanément : "[it is] logically impossible to maximize in more than one dimension at the same time unless the dimensions are monotone transformations of one another" [3], ce qui implique qu'il y a un choix inéluctable à faire entre optimisation financière et considérations sociales. Sternberg (2000) va dans le même sens en insistant sur le fait que les actionnaires sont les seuls propriétaires des entreprises et qu'une gestion qui prendrait en compte les parties prenantes et dépenserait une partie des bénéfices dans des politiques internes ou externes, sociales ou environnementales, les priveraient d'une partie des revenus qui leur sont dûs : "Businesses are owned by their shareholders - any money they spend on so-called social responsibility is effectively theft from those shareholders who can, after all, decide for themselves if they want to give to charity" [4]. Jensen (2002) va plus loin en arguant que les entreprises dont les managers sont influencés par les parties-prenantes sont handicapées dans la bataille pour la survie : "What is commonly known as stakeholder theory, while not totally without content, is fundamentally flawed because it violates the proposition that any organization must have a single-valued objective as a precursor to purposeful or rational behavior. In particular, I argue that a firm that adopts stakeholder theory will be handicapped in the competition for survival because, as a basis for action, stakeholder theory politicizes the corporation, and it leaves its managers empowered to exercise their own preferences in spending the firm's resources" [5].

Le débat sur l'objectif même de la RSE est ouvert. Dans la lecture friedmanienne, avoir des

3. "Il est logiquement impossible de maximiser dans plus d'une dimension à la fois sauf si les dimensions sont des transformations monotones de l'autre.

4. "Les entreprises sont détenues par leurs actionnaires - tout l'argent consacré à ce que l'on appelle la responsabilité sociale est effectivement volé à ces actionnaires qui peuvent, après tout, décider par eux-mêmes s'ils veulent donner à la charité".

5. "Ce qui est communément connu comme la théorie des parties prenantes, tout en n'étant pas totalement sans contenu, est fondamentalement vicié, parce qu'elle viole la proposition selon laquelle toute organisation doit avoir un objectif unique comme préambule à un comportement déterminé et rationnel. En particulier, je dirais qu'une entreprise qui adopte la théorie des parties prenantes sera handicapée dans la compétition pour la survie, car son action politise l'entreprise, et laisse les gestionnaires habilités exercer leur propres préférences dans la dépense des ressources de l'entreprise."

objectifs extra-financiers implique un arbitrage entre bénéfices publics et coûts privés, ce qui peut affaiblir l'entreprise. La responsabilité extra-financière devient ainsi synonyme d'irresponsabilité. Mais la prise en compte d'externalités extra-financières est croissante depuis les années 80, même si des différences géographiques apparaissent. Porter et Kramer (2011), professeurs à Harvard, militent ainsi pour la création de valeur partagée, "creation of shared value", par opposition à la création de valeur actionnariale, "creation of shareholder value". En revanche, dans le cadre friedmanien, la RSE ne peut être définie, a maxima, qu'uniquement de manière exogène par don philanthropique. Mais ce cadre est restrictif, et les récentes avancées de recherche sur la RSE et la performance financière des entreprises montrent qu'elles sont intrinsèquement endogènes, pour plusieurs raisons.

Crifo et Forget (2012) distinguent ainsi 3 grands types de causes d'imperfections de marchés potentiellement sources de développement de la RSE. En premier lieu se pose la question de la complémentarité ou substituabilité entre RSE et régulateurs à propos de la fourniture de biens publics. "CSR represents a response to market and redistributive imperfections because of government failures or in order to promote values that are not shared by law makers."[6], Bénabou et Tirole, 2010. La RSE et la régulation sont substituts, car les entreprises peuvent être incitées à préempter la régulation pour augmenter leurs profits en réduisant le niveau des normes (Lutz et al. 2000) ou lorsque les coûts d'organisation et de lobbyisme du secteur sont trop élevés (Maxwell et al. 2000). Mais RSE et régulation sont complémentaires si l'on considère que les investissement en RSE des entreprises , signaux pour les régulateurs (Johnstone et Labonne, 2009), ont notamment pour but de réduire les coûts de conformisation aux normes actuelles (Maxwell et Decker 2006). Les défaillances de gouvernance, dont la capture d'intérêts par les lobbies, les différences géographiques de législation, les coûts de transaction ou les asymétries d'information, sont aussi des explications au rôle de complément joué par la RSE (Bénabou et Tirole, 2010). Le régulateur, pour qui le monitoring de la conformité a un coût, peut être d'ailleurs lui aussi enclin à réduire les coûts de la régulation pour les entreprises, afin qu'elles développent des certifications volontaires (Lyon et Maxwell, 2008).

6. "La RSE représente une réponse au marché et aux imperfections de redistribution à cause des lacunes du gouvernement ou pour promouvoir des valeurs non partagées par le législateur"

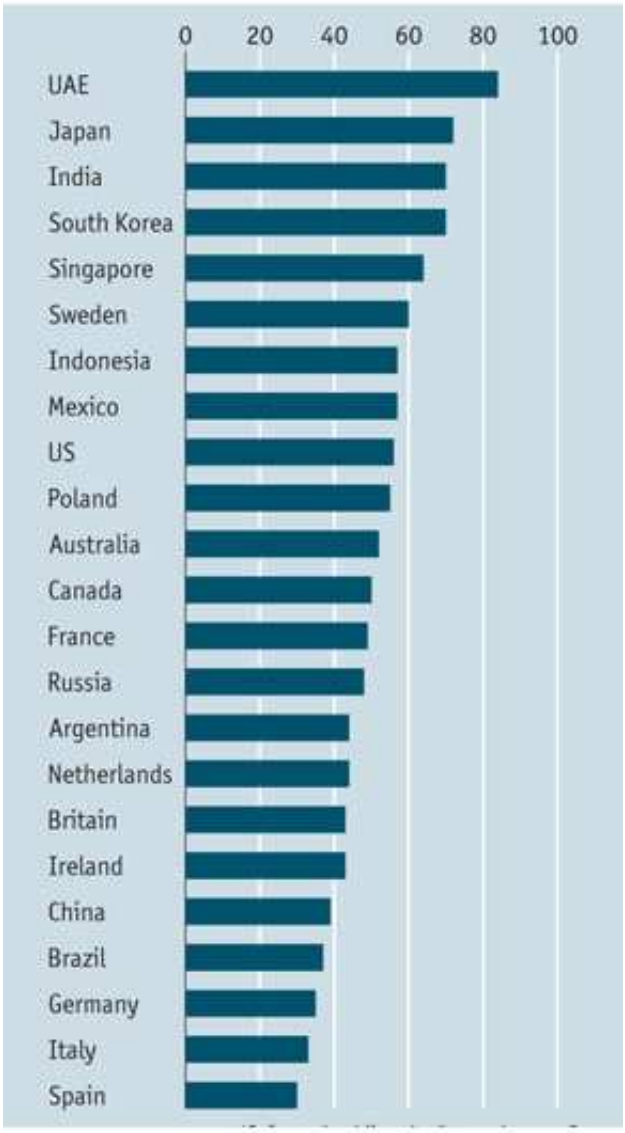


FIGURE 1.2 – % de personnes "informées" plutôt ou pleinement d'accord avec l'affirmation : "The social responsibility of business is to increase its profits". Source : Edelman, Trust barometer 2011

En outre, comme le soulignent Van den Berghe et Louche (2005), "companies are facing a new invisible hand, that is non-market forces exerted by NGOs, media trade-union and others, and influenced by this new invisible hand, they start to consider CSR as prerequisite for sustainable growth and welfare"[7]. Dans ce contexte, la RSE est également un moyen d'éviter le risque de contestabilité sociale et de s'assurer contre celui-ci sur le long-terme (Hommel et Goddard, 2001). Reste à décrypter les mécanismes directs ou indirects de cette "main invisible". Des informations divulguées par les ONGs sont reprises par leurs congénères (Couttenier et Hatte, 2012), influencent les médias et ainsi les consommateurs et parties-prenantes des entreprises. C'est pourquoi Baron (2001) définit les ONGs comme des "private politics", ce qui fonde un nouveau terreau fertile de recherche. En simplifiant, une ONG peut avoir 2 grandes stratégies : adopter un comportement de "bad cop" en divulguant des informations négatives sur les firmes scrutées voire en lançant des campagnes de boycott, ou de "good cop" récompensant les entreprises vertueuses par la publication d'informations positives ou par des prix, voire en participant directement à l'amélioration de la RSE au sein de l'entreprise .

Si les études théoriques de Baron et Dirmeier (2007) et Sinclair-Desgagné et Gozlan (2003) montrent que la première stratégie est globalement plus efficace, elles peuvent être complémentaires (Baron, 2012). En outre, Glachant et Moineville (2012) montrent que ce choix dépend du budget de l'ONG, une riche ONG ayant plus intérêt à "boo the laggards" (huer les retardataires). Bien sûr, plus une entreprise est visible, plus elle est soumise à la pression des "private politics". Or la visibilité d'une entreprise est supérieure pour les secteurs orientés consommateurs (Margolis et Walsh, 2001) et les industries notoirement sales (Brown et al., 2006). Sachant cela, les ONGs "bad cops" ciblent en priorité les entreprises "soft", i.e. celles qui ont de plutôt bonnes performances ESG, car ils savent que leurs campagnes auront de meilleures chances d'avoir un impact sur celles-ci (Baron et al., 2008 et Baron 2009).

Bien sûr, la question de l'importance des comportements pro-sociaux des dirigeants ne peut être écartée. Selon ce paradigme, les profits sont partiellement sacrifiés sur l'autel de l'intérêt

7. "Les entreprises font face à une nouvelle main invisible, celle de forces non marchandes exercées par les ONG, les médias, les syndicats ou autres ; et, influencées par cette nouvelle main invisible, elles commencent à considérer la RSE comme un prérequis à une croissance et un bien-être soutenable"

social (Bénabou et Tirole, 2010). Comme le soulignent Crifo et Forget (2012) : "Typically this corresponds to Milton Friedman's view that CSR amounts to spending others' money for individual pro-social motivations"[8]. Ces comportements peuvent toucher les managers ou les consommateurs, qu'ils soient intrinsèques ou motivés par des préoccupations d'image ou d'estime de soi (Bénabou et Tirole, 2010). Cependant, ce phénomène n'est pas forcément ambivalent. Ainsi, la mise en valeur de la RSE sur un produit peut avoir un effet négatif sur les ventes (exemple d'un éco-label pour le vin ayant une valeur négative à partir d'un seuil de prix, Delmas et Grant, 2010). Enfin, pour clore ce bref rappel sur les théories définissant la RSE, il est bon de mentionner la distinction effectuée par Garriga et Melé (2004), proche mais plus large que les précédentes. Elle distingue trois familles de théories. Selon la première, instrumentale, la RSE n'est qu'un instrument d'un objectif financier. Les négociations de pouvoir dans l'arène politique, qui rendent les entreprises enclines à accepter un certain niveau de RSE (voir Lyon 2013), constituent la théorie politique. Les théories intégratives de demande sociale et éthiques complètent ce champ théorique ; en effet différentes théories de la justice peuvent être source de préférence managériale pour la RSE.

La Commission Européenne définit clairement la RSE comme endogène et positive : "Intégration volontaire par les entreprises de préoccupations sociales et environnementales à leurs activités commerciales et leurs relations avec leurs parties prenantes." La question du caractère volontaire, et donc du dépassement du cadre légal, est abordée plus explicitement par Portney (2008) : " [CSR is] a consistent pattern of private firms doing more than they are required to do under applicable laws and regulations governing the environment, worker safety and health, and investments in the communities they work"[9]. La question de la définition de la RSE est bien évidemment cruciale avant de chercher à comprendre ses mécanismes ou son efficacité. Cette définition est variable selon les pays, pour des raisons économiques, politiques (Matten et Moon, 2008), juridiques (Reinhardt, Stavins et Vietor, 2008), ou de perception de l'éthique. La RSE fait également intervenir différents groupes d'acteurs eux-mêmes hétérogènes (entreprises, ONG,

8. "Typiquement, cela correspond à l'avis de Milton Friedman disant que la RSE revient à dépenser l'argent des autres pour des motifs pro-sociaux individuels".

9. "La RSE est un ensemble de sociétés privées faisant plus que ce qu'ils sont tenus de faire en vertu des lois et règlements en vigueur régissant l'environnement, la sécurité et la santé des ouvriers, ainsi que les investissements dans les collectivités où ils travaillent."

médias, marchés financiers, consommateurs pour nous restreindre au champ des acteurs couverts par cette thèse). La section 4 de ce chapitre présente des faits stylisés sur ces nuances et les liens qui unissent ces différentes parties-prenantes.

La définition même de la RSE est donc sujette à controverse théorique, dépendante du contexte et des préférences de ses intervenants, bien que chacun la mette en avant. Cette thèse a pour ambition d'améliorer la compréhension des enjeux, stratégies et impacts de la responsabilité sociale des entreprises (RSE), en particulier pour ce qui concerne les grandes multinationales mondiales.

1.2 Plan de la thèse

Ce chapitre liminaire pose les bases de la réflexion. Il est en effet nécessaire de bien cerner les différentes définitions de la RSE dans leur contexte théorique. Constatant la complexité du prisme des facteurs de définition de la RSE, la section suivante contribue à sa clarification. Elle présente en effet des faits stylisés concernant les sources de la RSE, son évolution temporelle, ses particularités géographiques, son lexique, ainsi que l'interdépendance de ces variables. Ce chapitre présente également la base Covalence-Ethicalquote, socle des analyses empiriques, puis souligne les contributions majeures de cette thèse, avant de se projeter vers le futur en dessinant de prochaines pistes de recherche.

Le deuxième chapitre, "The weighting of CSR dimensions : Does one size fit all ? "[10], vise à clarifier les enjeux de la RSE et questionne les fondements de son évaluation. Quels sont les objectifs extra-financiers des différentes parties-prenantes des entreprises ? Comment penser une évaluation globale de performance RSE sans fongibilité entre pratiques positives et négatives des entreprises ? Autrement dit, comment comparer RSE et iRSE (Irresponsabilité Sociale de l'Entreprise) ? Si ces questions ont fait l'objet d'études récentes, il semble nécessaire d'interroger la commensurabilité des critères E, S et G. Une pollution des sols vaut-elle un licenciement ? Comment les comparer ? Existe-t-il des différences sectorielles ? Ainsi, une bonne performance environnementale est-elle aussi importante pour une banque que pour une entreprise pétrolière ?

10. "La pondération des dimensions de la RSE : une taille unique ?"

Tout d'abord nous présentons des faits stylisés sur la divulgation d'informations extra-financières en fonction des secteurs et des sources d'information. Par la suite, nous remettons en question l'évaluation globale de la performance ESG des entreprises. Ainsi, nous souhaitons améliorer la pertinence de la notation extra-financière des firmes au regard de la spécificité sectorielle des enjeux ESG.

Le troisième chapitre, "CSR communication strategies, frontal credibility defence and bypass counter-attack "[11], prend en compte ces résultats et analyse les mécanismes endogènes de communication ESG des entreprises, des médias et des ONGs. Plus précisément, il explore les réactions des entreprises face à la publication d'informations ESG par des sources externes (médias ou ONG) et leurs concurrents. Lorsque leur réputation est ternie, les entreprises choisissent-elles de faire profil-bas ou bien, au contraire, de contre-attaquer en augmentant leur communication ESG ? Le font-elles frontalement en répondant directement sur le critère ESG décrié, ou par contournement, par exemple sur l'environnement lorsqu'attaquées sur des critères sociaux ? Ces stratégies sont-elles efficaces ? Les entreprises peuvent-elles influencer les médias et les ONG en réduisant leurs publications négatives ou en amplifiant les positives ? A l'inverse, la communication des firmes a-t-elle un effet boomerang ? Les ONG, comme Greepeace, qui choisissent d'abord de dénoncer les manquements ESG des entreprises, exercent-elles également leur vigilance sur leurs homologues ayant choisi de collaborer avec les firmes ? Enfin, assiste-t-on à des comportements mimétiques ou de passager clandestin entre entreprises en concurrence sectorielle ?

Enfin, le quatrième chapitre, "Every Little Helps ? ESG news disclosure and stock market reaction"[12], se focalise sur l'impact des informations ESG sur la rentabilité financière des entreprises. En couplant notamment des données financières avec celles fournies par Covalence-Ethicalquote, cette étude d'évènement élargit le spectre des questions soulevées à ce sujet. La première hypothèse est peu originale mais sujette à controverse : est-il rentable d'être bon ? Soulignant le besoin de dépasser cette question préliminaire, les suivantes enrichissent le débat : la carotte ou le bâton (les informations positives ont-elles plus d'impact que les négatives) ? L'ef-

11. "Les stratégies de communication RSE, défense de la crédibilité et contre-attaque par contournement."
12. "Les cours d'eau font-ils les grandes rivières ? Divulgation d'informations ESG et réaction des marchés financiers."

ficacité de la communication RSE des entreprises passe-t-elle par leurs relations publiques (les informations externes, médias ou ONGs, ont-elles plus d'impact que les informations internes) ? La réputation est-elle une réserve de bonne volonté (la réputation sert-elle d'assurance contre l'impact financier des évènements ESG) ? Enfin, ce travail teste également l'impact de paramètres originaux sur les liens entre RSE et performance financière : le contenu lexical des informations, la proximité culturelle, l'importance sectorielle des critères ESG ou encore l'attention limitée des investisseurs.

Mener ces recherches nécessite de réaliser des analyses empiriques. A cette fin, j'utilise notamment une base de données originale développée par une entreprise suisse, Covalence Ethicalquote, spécialisée dans la cotation éthique. Cette base recense plus de 190000 informations brutes divulguées sur Internet entre 2002 et 2010, par plus de 10000 sources, entreprises, ONG et médias, sur les pratiques environnementales, sociales et de gouvernance de 580 entreprises parmi les plus larges au niveau mondial. Ces publications sont recueillies en 5 langues. Cette base est une alternative intéressante aux données fournies par les agences de notation extra-financière, largement utilisées dans cette littérature. En effet, contrairement à celles-ci, les informations qu'elle contient sont de première main, classifiées mais pas agrégées, donc plus flexibles et utilisables sur une base journalière. Les informations contenues dans cette base peuvent être par exemple un article d'un journal indien dénonçant une pollution provoquée par une entreprise anglaise du secteur chimique, la construction d'un terrain de basket à destination des enfants orphelins au Maroc sponsorisée par une firme alimentaire américaine, ou un article qu'une ONG poste sur son site, concernant des liens de corruption entretenus par une entreprise avec un régime dictatorial pour s'assurer des marchés (voir Figure 1.10) : i).

1.3 Covalence Ethicalquote

Covalence Ethicalquote a été créée en 2001, à Genève. En partenariat avec Datadoxa, elle collecte et trie des informations liées à la responsabilité sociale de 581 entreprises du the Dow Jones Sector Titans Indexes et des plus grandes entreprises du Swiss Performance Index, parmi 18 secteurs. Son activité historique est la vente de rapports personnalisés à des entreprises (Coca-Cola, Pfizer, Rio Tinto...), investisseurs financiers (dont Barclays, BNP Paribas, HSBC, ...),et

ONG (Gain, MSF, WWF, ...) sur la réputation éthique des entreprises surveillées. Elle publie également chaque mois un "Ethical snapshot" sur chaque entreprise incluse dans l'univers (voir Figure 1.11) Aujourd'hui signataire du PRI (Principles of Responsible Investment), Covalence Ethicalquote développe également depuis 2011 avec BBGI Group, société de gestion de fortune basée à Genève, des indices éthiques BBGI-EthicalQuote, mêlant objectifs financiers et extra-financiers.

1.3.1 Méthodes

Selon l'entreprise, chaque jour, 20 analystes examinent plus de 2000 informations (en anglais, espagnol, allemand et français). Les analystes catégorisent les informations selon 45 critères agrégés en 4 grandes familles : conditions de travail, impact de la production, des produits et impact institutionnel (voir en annexe la liste des critères). Sont également renseignés la date de l'évènement, l'entreprise concernée, son secteur, la source de l'information, son type, sa localisation, ainsi que son pays d'occurrence. Le spectre des informations recensées est très large (voir en annexe quelques exemples1.10), les évènements recueillis sont d'importances diverses, certains sont très médiatisés, d'autres très peu. Certains critères ne sont utilisés que pour rendre compte d'évènements positifs (*social sponsoring* ou *humanitarian policy*) ; ceux-ci sont principalement relayés par les entreprises, les médias et les "good cops" ; d'autres sont plutôt l'apanage des "bad cops" (*downsizing* ou *product environmental risk* par exemple). Parmi les informations positives, on trouve également des annonces de lancements de produits éco-innovants, des récompenses RSE, etc. Les informations négatives, quant à elles, peuvent concerner des émissions de produits toxiques, des rumeurs de licenciement ou la divulgation de mauvaises pratiques envers les salariés de sous-traitants par exemple. La quasi-totalité des critères peut caractériser des informations positives ou négatives. Les trois critères agrégés de la classification E, S ou G, présentent des informations positives et négatives. Entre janvier 2001 et décembre 2010, la base recense 197688 occurrences d'informations divulguées par plus de 10000 sources.

1.3.2 Traitement et limites

Le maniement d'une si large base de données, aux paramètres multiples, soulève en effet plusieurs questions. Tout d'abord : comment définit-on un évènement empiriquement, de manière

systématique ? Une annonce est assez simple à définir : c'est une information divulguée un jour donné, sur une entreprise unique[13], par une source unique, ayant un score unique (positif ou négatif), ayant un contenu se rapportant à un ou plusieurs critères ESG, et pouvant concerner zéro, un ou plusieurs pays d'occurrence. Mais plusieurs annonces peuvent traiter d'un même évènement. La base ne recense pas les articles dont le contenu est quasiment identique à un autre déjà recueilli. Ainsi, si plusieurs médias reprennent par exemple une dépêche AFP de manière très semblable, un seul de ces articles sera conservé. Ceci limite malheureusement la possibilité de rechercher l'influence de l'intensité médiatique d'un évènement. Par la suite, les annonces qui ont en commun entreprise, jour, score, ensemble des critères et ensemble des pays d'occurrence sont regroupées pour ne former qu'un seul évènement. En effet, la question de la période sur laquelle plusieurs annonces d'un même type ne concernent qu'un unique évènement est également difficile à trancher. On pourrait élargir cette période à plusieurs jours, mais dans ce cas où s'arrêter ? Un tri manuel serait certes plus efficace, mais se révèle impensable au vu du volume de données. Certaines annonces sont liées à une première, mais ne sont publiées que plus tard. Par exemple, l'accident de Deep Water Horizon, le 20 avril 2010, a généré de nombreuses informations les jours suivants : sur l'explosion en elle-même, la marée noire, le moment où celle-ci a touché les côtes, les annonces de poursuites, les procès, etc. Le gouvernement américain a d'ailleurs encore blâmé publiquement l'entreprise BP le 31 aout 2012, ce qui a encore fait chuter de 3% son cours. Nous considérons qu'il s'agit d'évènements distincts. La définition empirique d'un évènement doit se constituer par journée. Tout autre définition est en effet difficilement justifiable.

Il est nécessaire d'appliquer plusieurs processus de tri à la base Covalence Ethicalquote en vue d'une utilisation rigoureuse. Tout d'abord, les informations datant de 2001 ont été supprimées, le processus de collecte apparaît en effet assez peu stable avant 2002 (moins d'évènements recensés, moins de variété dans les entreprises concernées). Comme certaines informations correspondent à plusieurs des 45 critères, et qu'une ligne de la base est construite avec un seul critère, deux lignes peuvent correspondre à une seule information. J'apparie donc ces lignes redondantes en utilisant des variables identificatrices. Ceci laisse 130025 (131686) occurrences. J'ai également choisi de ne considérer que les 100 entreprises ayant eu entre 2002 et 2010 le plus grand nombre

13. Certains articles de la base traitent de plusieurs entreprises. Pour une plus grande clarté, ces articles sont séparés en autant d'annonces que d'entreprises concernées.

d'informations ESG (voir en annexe la liste des entreprises inclues dans l'échantillon). Ceci laisse 96145 informations. Pour le troisième chapitre, je retire les annonces divulguées les week-ends et jours fériés. Ceci laisse 79215 informations, positives ou négatives, de janvier 2002 à décembre 2010, concernant 100 multinationales cotées en bourse. Il est possible que plusieurs évènements ESG différents soient divulgués le même jour pour une même entreprise. Si on ne compte que les couples jours/entreprises, utilisés pour les tests de robustesse du chapitre 3, cela fait 61327 couples jours/entreprises comptant au moins un évènement, ce qui fait près d'un jour sur cinq concerné par un évènement, en moyenne, par entreprise.

1.4 Faits stylisés

Nous l'avons vu, la RSE est multidimensionnelle, sa définition encore en débat. Pour prolonger celui-ci, en préambule aux études des prochains chapitres, la base Covalence-Ethicalquote permet de dégager des faits stylisés sur la RSE, ses sources, son évolution temporelle, ses paramètres géographiques, son lexique.

1.4.1 Sources

Covalence Ethicalquote effectue deux niveaux d'agrégation des sources. Le premier niveau compte 19 catégories et le second en compte 9, détaillées dans le tableau 1.1. La principale source d'information est constituée par les médias. Que ce soient pour les informations positives ou négatives, ils divulguent les 3/4 des informations. Pour simplifier l'interprétation, nous n'utilisons que les catégories *Média, ONG* et *Entreprise*, laissant les autres de côté, bien que leur analyse puisse être prolifique.

Les médias sont de loin le principal pourvoyeur d'informations, avec 87% du total. L'échantillon est à peu près équilibré entre les trois critères agrégés : les questions sociales sont les plus représentées avec 47%, l'environnement et la gouvernance représentant environ 30% des évènements. Certaines informations peuvent impliquer plusieurs critères ESG (généralement deux), comme l'environnement et le social, si l'on prend l'exemple Deep-Water Horizon. On en compte ici environ 10%. Par contre, le score est une variable biaisée. Le nombre d'informations positives

TABLE 1.1 – **Nombre d'informations ESG par source.**

Sources	# N	# P	Total
Média	22,061	42,596	64,657
Academique	142	523	665
Consultant	699	1,320	2,019
Entreprise	664	6,449	7,113
Gouvernzment	127	319	446
Individu	2,484	3,375	5,859
Organization internationale	174	564	738
ONG	3,325	1,985	5,310
Syndicat	276	77	353
Total	29,952	57,208	87,160

N et # P sont respectivement le nombre d'annonces ESG négatives et positives (classification Covalence)

TABLE 1.2 – **Pourcentage d'évènements ESG par source, score et critère. Nombre total de chaque type d'informations sur le total des informations ESG entre 2002 et 2010.**

	Entreprise		**Médias**		**ONG**		**Total**	
	# N	# P	# N	# P	# N	# P	# N	# P
Environnement	0.17	1.97	5.63	20.98	0.80	0.63	6.60	23.58
Social	0.31	2.52	12.99	19.07	0.39	0.84	14.69	22.42
Gouvernance	0.25	1.97	11.54	16.90	1.47	0.59	13.26	19.45
Total	0.73	6.45	30.16	56.94	3.66	2.05	34.55	65.45

représente près du double des négatives. Ceci n'est pas sans incidence sur la notion de réputation, sa normalisation ; nous en reparlerons. Plus précisément, le ratio est de plus de trois pour l'environnement et plus équilibré pour le social et la gouvernance (environ 1,5). Ceci confère un statut particulier à ce premier critère : les entreprises ne sont pas plus mises en avant sur celui-ci que sur les deux autres quand leurs efforts sont loués, mais elles sont moins attaquées sur l'environnement. Ce résultat général est bien sûr dû au poids des médias.

Les ONG, divulguant 5,7% des informations, sont plus incisives. En proportion, elles diffusent plus d'informations négatives (+80% par rapport aux positives), en particulier sur la gouvernance d'entreprise (plus du double) et dans une moindre mesure sur l'environnement. Lyon (2010) distingue deux grands types de stratégies des ONG : soit elle collaborent avec les entreprises et divulguentplutôt des information ESG positives, soit elles préfèrent la vigilance envers les entreprises et rapportent principalement des infomrations négatives. En effet, si les ONG semblent plutôt préférer tenir un rôle de "bad cop" sur ces critères, elles choisissent celui du "good cop" pour traiter des questions sociales (+50% d'informations positives). Cette différence est principalement due à un plus grand nombre d'attaques sur la gouvernance de la part des ONG. Le choix , pour les ONG, d'adoption de stratégie entre social et gouvernance en particulier ne s'explique pas en fonction de la communication médiatique. Si l'on considère que les informations issues des médias sont le principal vecteur des a priori de réputation des parties-prenantes, ce résultat semble ne pas aller dans le sens de la théorie de Glachant et Moineville (2012) : "it is more effective to go against the stakeholder's a priori built upon the environment characteristics. NGOs need to adapt to the particularities of each situation (financial resources available for them, firms' CSR cost distributions) that may be very different depending on the industry sector / CSR dimension at stake / country"[14]. La deuxième partie de la phrase recense des pistes très intéressantes pour de futures recherches théoriques et empiriques sur ce sujet, notamment pour le chapitre sur les stratégies de communication RSE.

14. "Il est plus efficace d'aller à l'encontre des a priori des parties-prenantes basés sur les caractéristiques de l'environnement. Les ONG doivent s'adapter aux particularités de chaque situation (ressources financières disponibles pour eux, coûts de distribution de la RSE par les entreprises) qui peuvent être très différentes selon le secteur d'activité / dimension RSE en jeu / pays."

Enfin, sans surprise, les entreprises présentent bien plus d'informations positives que négatives (presque dix fois plus). Représentant seulement moins de 1% du total, et difficiles à interpréter, les informations négatives internes ne seront pas analysées pour l'instant. Les bonnes nouvelles sociales sont le point le plus mis en avant par les entreprises, légèrement devant les deux autres.

TABLE 1.3 – **Nombre d'informations et part d'informations positives publiées par les sources d'un pays, par type de source, pour les 10 états ayant le plus de sources d'informations.**

Pays de la source	**Internes**		**Médias**		**ONG**		**Total**	
	% #	% P	% #	% P	% #	% P	#	% P
ÉTATS-UNIS	8	91	85	70	7	40	32590	69
ROYAUME-UNI	8	95	82	64	10	34	9821	63
FRANCE	7	96	90	51	3	39	7154	54
ALLEMAGNE	11	97	85	54	5	37	3417	58
CANADA	2	93	95	69	3	35	2431	69
ESPAGNE	3	77	91	71	6	38	2148	69
SUISSE	16	97	69	43	15	28	1724	49
INDE	2	91	90	72	8	36	1688	70
AUSTRALIE	4	89	93	68	4	23	1269	67
MEXIQUE	0	100	96	74	4	39	814	72

La plus grande source d'information est située aux États-Unis, avec plus de 32000 annonces(voir tableau 1.3). Environ 65% des informations ESG publiées par des sources américaines concernent des entreprises américaines. Ceci est supérieur à la moyenne sur l'échantillon total qui est de 40%, mais cela s'explique notamment par le biais d'absence d'entreprises de nombreux pays dans l'échantillon. Le nombre d'articles dont la source et au moins l'un des lieux d'occurrence partagent le même pays est du même ordre, d'environ 36% (39% aux États-Unis, 19% au Royaume-Uni, 65% en Chine -treizième pays représenté avec 572 annonces-). Le biais des langues dans lesquelles sont recueillies les informations est prendre en compte pour les analyses géographiques. On constate également qu'il y a un biais pour la Suisse, manifestement sur-représentée. C'est aussi le pays où la communication d'entreprise est la plus présente (voir également carte 1.12), tout comme les ONG. Partout ailleurs, les médias occupent une place prépondérante (de 82% pour le Royaume-Uni à 96% pour le Mexique. Hormis la Suisse, la France et l'Allemagne ont les médias les plus agressifs en proportion des informations publiées (respec-

tivement 51% et 54% d'informations positives à comparer avec les 74% du Mexique, les 72% de l'Inde, les 71% en Espagne et les 70% aux États-Unis). Les informations ONG sont très largement fournies par l'Amérique du Nord et l'Europe. Hormis ceux-ci, seuls les ONG d'Australie, d'Inde, du Japon, d'Afrique du Sud et du Brésil ont diffusé plus de 10 informations inclues dans la base Covalence. Les ONG japonaises, brésiliennes et américaines adoptent une stratégie légèrement plus "good cop" (40% pour les États-Unis) que les autres, en particulier l'Australie (23%) (voir la carte 1.13 à propos de la comparaison internationale des stratégies des ONG pour les pays ayant plus de 10 informations ONG).

TABLE 1.4 – **Nombre d'informations et part d'informations positives publiées par les sources d'un pays, par critère, pour les 10 états ayant le plus de sources d'informations.**

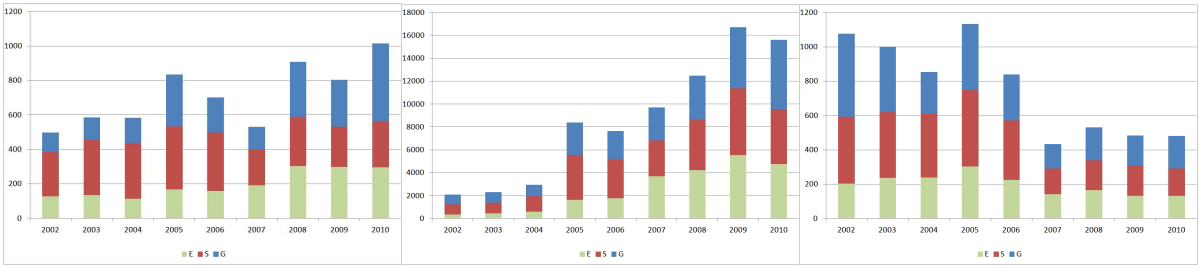
Pays de la source	**E**		**S**		**G**		**Total**	
	% #	% P	% #	% P	% #	% P	#	% P
ÉTATS-UNIS	38	79	43	66	40	62	32590	69
ROYAUME-UNI	36	72	42	63	44	55	9821	63
FRANCE	33	75	48	39	39	56	7154	54
ALLEMAGNE	33	76	51	47	37	56	3417	58
CANADA	40	79	43	65	37	62	2431	69
ESPAGNE	32	79	48	61	41	66	2148	69
SUISSE	24	60	52	44	48	47	1724	49
INDE	35	72	50	65	40	72	1688	70
AUSTRALIE	45	75	36	58	42	66	1269	67
MEXIQUE	26	78	58	69	36	71	814	72

Il est également intéressant d'analyser les différences d'intérêt relatif porté à chaque critère ESG par les sources des pays (voir tableau 1.4). L'environnement est un thème majeur en Australie (45%) et au Canada (40%), contrairement au Mexique (26%) ou en Suisse (24%). Excepté la Suisse, le pourcentage d'informations environnementales positives est peu variable, situé en 70% et 80%. Les informations sociales sont majoritaires au Mexique (58%) et importantes en Inde (50%). Le faible niveau relatif du PIB par habitant de ces pays est probablement un facteur de son importance. Les sources de ces pays sont également parmi les plus "bienveillantes" (69% et 65%), ce qui est comparable avec la majorité des pays), alors que les sources françaises sont plus agressives sur ce critère (39%). Enfin, la gouvernance d'entreprise est une préoccupation majeure en Suisse (48%), où le ratio d'informations positives est le plus faible sur ce critère,

le seul en-dessous de 50%. La part d'informations portant sur la gouvernance est néanmoins la moins variable entre les pays. D'ailleurs, sur ce critère, le Mexique (71%) et l'Inde (72% malgré une proportion d'ONG assez importante, 8%) sont les plus bienveillants.

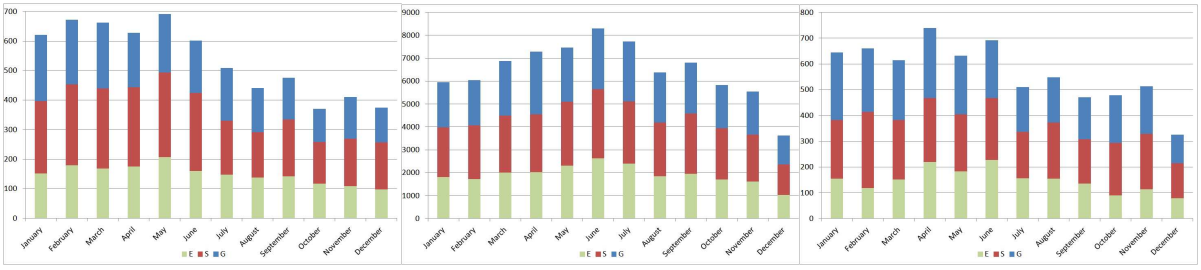
1.4.2 Temps

Annonces par année



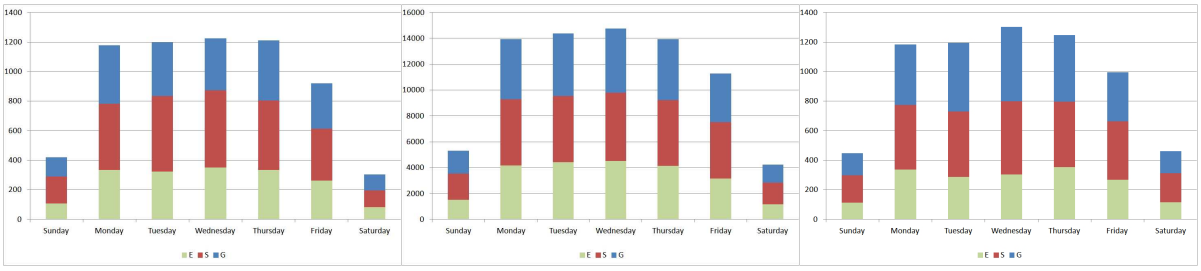
(a) Internes (b) Médias (c) ONG

Annonces par mois



(d) Internes (e) Médias (f) ONG

Annonces par jour



(g) Internes (h) Médias (i) ONG

FIGURE 1.3 – **Répartition des informations ESG dans le temps.** Cette figure présente, pour chaque type de source, le nombre moyen d'annonces ESG par année, mois, jour de la semaine. Les informations E, S et G sont séparées. Comme les répartitions entre informations positives et négatives étaient similaires, ce graphique présente uniquement le volume total d'informations. Données : Covalence. Période : 2002-2010.

Comme prévu, le nombre d'informations ESG enregistre une tendance croissante dans le

temps (voir figures 1.3a, 1.3b, 1.3c). Le nombre annuel d'informations de l'échantillon passe de 3000 en 2002 à 14000 environ en 2010, soit une moyenne de croissance annuelle de 21%. La croissance est plus soutenue pour les médias (+28%), alors que les divulgations ESG des ONG ont plutôt diminué. Nous ne nous intéresserons pas aux causes de cette baisse tendancielle, mais des contraintes de budget n'y sont peut-être pas étrangères. L'évolution des critères E, S et G est conforme à l'intuition, sur la période, les questions environnementales ont le plus progressé (+29% toutes sources confondues). On observe encore une augmentation substantielle des informations relatives à la gouvernance d'entreprise depuis la crise financière de 2008.

Il est également intéressant de noter comment ces informations sont distribuées dans l'année. La communication ESG des entreprises est plus forte au premier semestre, baisse en été (ce qui correspond au cycle d'activités) et est faible en fin d'année (voir figure 1.3d). La séquence est quasi-similaire pour les ONG(voir figure 1.3f). Cependant, pour les médias (voir figure 1.3e), l'été semble propice à la divulgation d'informations ESG, peut-être pour la même raison que précédemment, c'est-à-dire la faible activité des affaires. Enfin, comme prévu, le nombre d'informations ESG publiées le week-end est très faible. Outre cette évidence, le nombre d'informations publiées en semaine est stable, sauf le vendredi où le nombre d'annonces est significativement plus faible, quelle que soit la source (voir figures 1.3g, 1.3h, 1.3i). La distribution d'informations E, S et G est, elle, stable dans la semaine.

1.4.3 Géographie

Les aspects géographiques et culturels de la RSE sont à facettes multiples. En effet, les trois grands acteurs étudiés, entreprises, médias et ONG, peuvent avoir des préférences pour la RSE différentes, et au sein de celles-ci, des préférences relatives différentes entre les critères. Ce peut être également le cas des marchés financiers impliqués dans le chapitre 3. Les préférences RSE de ces acteurs au sein de chaque pays sont probablement corrélées, mais leurs définitions et le cadre théorique d'analyse de ces phénomènes reste encore globalement à investiguer. L'impact relatif d'évènements ESG dépend très probablement de distances géographiques et culturelles, notamment linguistiques, entre l'état source, celui abritant le siège social de l'entreprise concernée, et celui dans lequel l'évènement a lieu. La distance entre siège social et lieu d'occurrence d'un

évènement est d'ailleurs l'un des paramètres étudiés dans l'analyse des déterminants de l'impact financier des informations ESG, chapitre 3. Les caractéristiques des pays sources d'information viennent d'être succinctement abordées. De nombreuses études portent déjà sur des comparaisons de paramètres ou d'impacts de paramètres RSE entre les entreprises de différents pays : Chapple et al., 2012, en Asie ; Dasgupta et al. 2001 pour des pays en développement [15]. Certains travaux se focalisent également sur des pays en particulier (les plus fréquentes, par exemple aux États-Unis : Hamilton, 1995 ou Hart et Ahuja, 1996, au Japon : Takeda et Tomozawa, 2003, en Corée, Dasgupta et al. 2004). Mais peu s'intéressent à l'impact de la distance sur le niveau de retransmission financière d'évènements, bien que ce phénomène ait été mis en avant aux États-Unis par Engelberg et Parsons (2011). Encore plus rares sont les analyses des paramètres RSE des pays d'occurrence des évènements et des dynamiques commerciales et économiques qui en découlent. Kitzmueller (2010) souligne cependant l'importance des caractéristiques géographiques et institutionnelles des pays dans la confiance accordée à l'évaluation de la performance RSE des entreprises dans ces pays, et par conséquent dans les choix de localisation des firmes. Dam and Sholtens (2012) montrent que les entreprises les plus polluantes sont plus souvent installées dans des pays à faible réglementation environnementale. Cependant, les entreprises multinationales n'ont pas un impact significatif sur la régulation environnementale de ces pays" [16]. Sholtens and Dam (2007) mettent également en relief des sources culturelles de différences internationales de pratiques de la RSE. Cette introduction de thèse présente de nouveaux faits stylisés sur les caractéristiques RSE des pays d'occurrence des informations, possibles préalables à de futures recherches.

Tout d'abord, comme indiqué sur la carte 1.4, la majeure partie des évènements ESG recensés ont lieu aux États-Unis et en Europe. La distribution des lieux d'évènement est supérieure à celle de leurs sources. La Chine et l'Inde remontent dans le classement (voir tableau 1.5) ; le biais suisse est un peu moins important. La réputation ESG moyenne est globalement meilleure en Amérique du Nord et en Europe que dans le reste du monde, particulièrement en Amérique du Sud et en Asie, incluant ici la Russie ; la situation des pays africains est par ailleurs très variable.

15. Voir Kitzmueller (2010) pour pour une plus large revue des aspects internationaux de la RSE.

16. "More polluting firms are relatively more often located in countries with weak environmental regulation. However, multinational enterprises do not have a significant impact on environmental regulation in the host country."

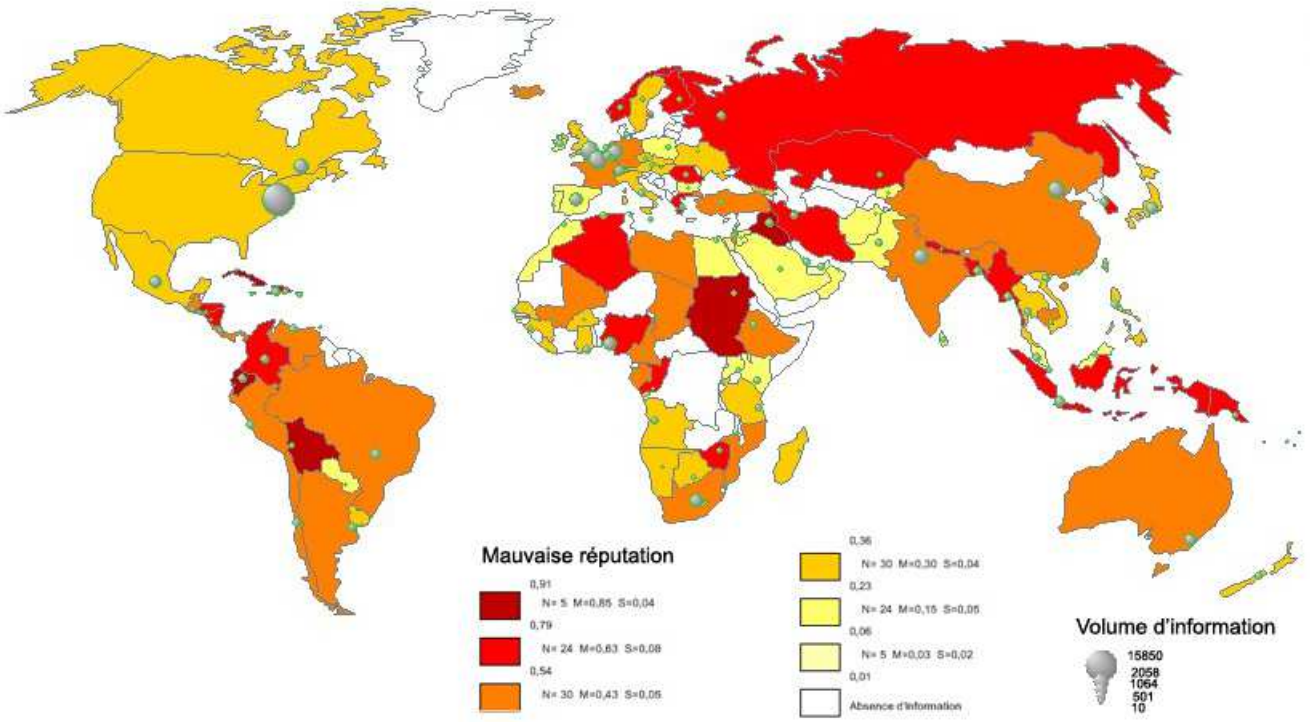


FIGURE 1.4 – **Nombre d'informations ESG (cercles) et part d'informations négatives (couleurs) par pays**, toutes sources confondues, entre 2002 et 2010.

Parmi les quinze états où ont eu lieu le plus d'évènements, le Nigeria a plus mauvaise réputation (seulement 32% d'informations positives) devant l'Afrique du Sud (47%) ; l'Espagne (79%) et le Japon (77%) ont la meilleure. Ce résultat s'affine en analysant les critères ESG. La carte 1.5 montre ainsi que les évènements négatifs sociaux sont les plus importants en Europe occidentale (Italie exceptée), dans les Amériques, en Afrique du Nord-Ouest, en Inde, au Japon et en Asie du Sud-Est (Birmanie exceptée). Parmi les principaux pays, la France (64%) et l'Espagne (65%) sont ceux où le critère social prend le plus de place. Mais leur réputation diverge : uniquement 35% des informations sociales sont positives pour la France (dernière parmi les quinze), contre 74% pour l'Espagne (première parmi les quinze). La gouvernance, quant à elle, est la préoccupation majeure de l'Afrique du Sud (54% d'informations sur la gouvernance dont 31% de positives), Nigeria (chiffres proches des précédents) ou en Chine (55% d'informations gouvernance dont 47% de positives). L'environnement est le critère le plus attaqué en Russie, en Europe de l'Est et en Australie notamment(46% des informations présentant une faible réputation environnementale, 64%).

En examinant plus précisément les critères ESG facteurs de différenciation de la réputation des pays, on remarque que le Japon est le pays où l'importance du critère environnemental est la plus haute et que sa réputation en la matière est tout à fait remarquable (97%, l'échantillon s'arrêtant fin 2010, avant le drame de Fukushima). Si l'environnement n'est pas le critère prégnant en Inde (30%) ou au Nigeria (26%), la réputation environnementale de ces pays est la plus faible (seulement 12% pour le Nigeria). Les cartes suivantes montrent les différences internationales de réputation concernant l'environnement 1.14, le social 1.15 et la gouvernance d'entreprise 1.16 (pour chacune, les pays ayant moins de 10 informations se rapportant au critère considéré ne sont pas pris en compte).

TABLE 1.5 – **Nombre d'informations et part d'informations positives publiées par les sources d'un pays, par critère, pour les 15 états où ont eu lieu le plus d'évènements.**

Pays d'occurrence	**E**		**S**		**G**		**Total**	
	% #	% P	% #	% P	% #	% P	#	% P
ÉTATS-UNIS	34	74	47	65	37	57	15850	66
ROYAUME-UNI	40	84	45	64	33	73	2721	73
FRANCE	25	78	64	35	27	67	2455	50
CHINE	16	78	45	54	55	47	2056	53
INDE	30	40	60	49	38	58	1684	52
ALLEMAGNE	26	82	50	43	38	47	1503	52
CANADA	46	75	45	67	30	72	1370	72
NIGERIA	26	12	49	42	54	27	1134	32
AFRIQUE DU SUD	9	62	51	63	53	31	1064	47
ESPAGNE	21	93	65	74	32	85	846	79
MEXIQUE	21	68	63	63	36	63	757	65
AUSTRALIE	46	64	37	56	37	69	712	64
JAPON	55	97	38	50	28	75	613	77
SUISSE	20	71	60	42	40	49	511	50
BRÉSIL	40	62	56	53	40	51	501	55

1.4.4 Lexique

> *"Les mots qui vont surgir savent de nous des choses que nous ignorons d'eux."* René Char

L'analyse de contenu est "une technique de recherche pour la description objective, systé-

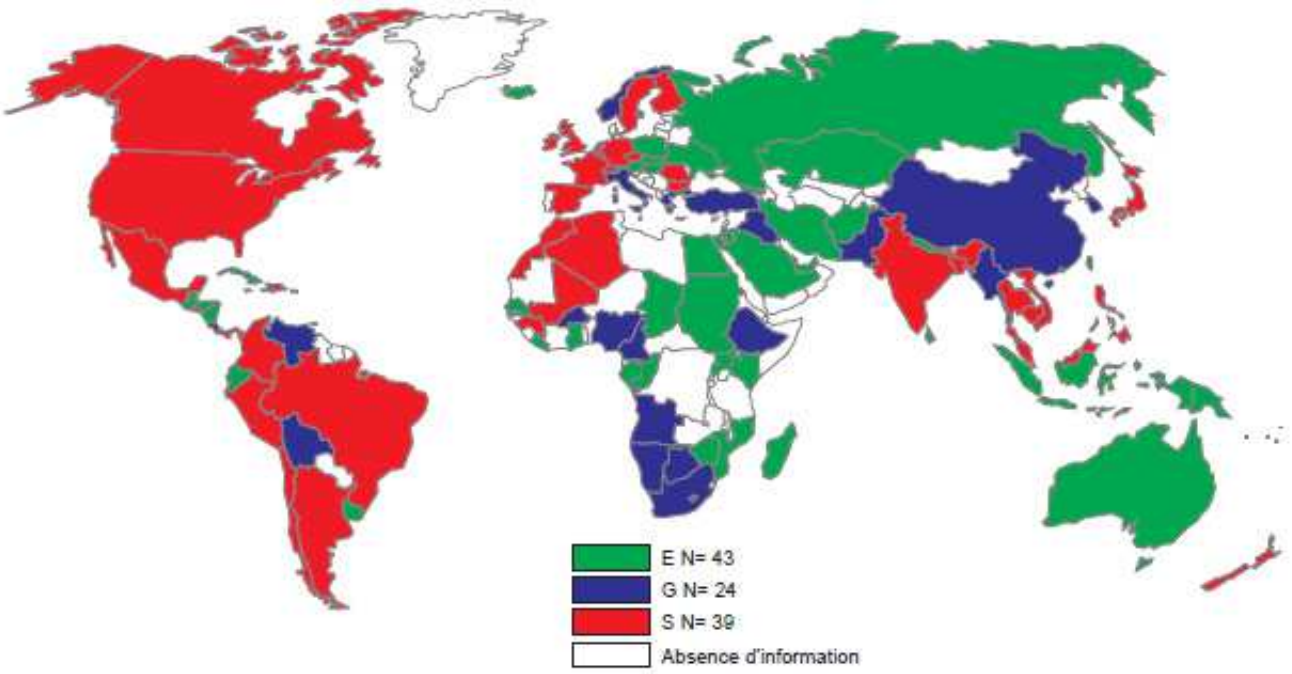


FIGURE 1.5 – **Critère ESG le plus important par pays pour les informations négatives.**

matique et quantitative du contenu manifeste de la communication" [17] (Berelson, 1952) ou plus simplement "une technique de recherche de mots ou de concepts dans un texte" [18] (Sweeney et Coughlan, 2008). Cette technique a été fréquemment utilisée en sciences politiques ou en médecine (voir par exemple, Robertson, 1976), pour l'étude de l'innovation des brevets (Packalen and Bhattacharya, 2012), la prédiction des mouvements de marchés par les journaux financiers (Schumaker and Chen, 2009), ou via l'humeur de Twitter (Bollen et al., 2011). Ces études soulignent bien l'importance du contenu des textes sur l'impact de leur objet car, comme le souligne Stempel (1981), l'analyse lexicale est "un système formel pour faire quelque chose que nous faisons informellement et plutôt fréquemment : tirer des conclusions de nos observations des contenus" [19].

Au niveau financier, Kogan et al., 2013, montrent que la prise en compte des informations dont le ton, positif ou négatif, peut être déterminé, améliore la fiabilité des prévisions du CAPM (Capital Asset Pricing Model). Autrement dit, connaître le contenu lexical des informations

17. "A research technique for the objective, systematic and quantitative description of the manifest content of communication."

18. "Content analysis is, at its simplest, a research technique used to determine the presence of certain words or concepts within text."

19. "A formal system for doing something that we do informally rather frequently, drawing conclusions from observations of content".

financières permet d'améliorer les prévisions et donc les performances financières. L'étude de l'impact du contenu lexical sur l'ampleur des pertes liées aux évènements ESG sera développée dans le dernier chapitre. Pour les publications ESG, la littérature naissante se focalise sur les rapports RSE annuels. En analysant ces derniers, Sweeney et Coughlan (2008) trouvent que les principaux critères ESG présents, pour chaque secteur d'activité, correspondent aux attentes, définies de manière exogène, des parties-prenantes. Les entreprises communiquent principalement sur le critère le plus important pour leur secteur. Nous développerons la question du critère majeur par secteur dans le prochain chapitre.

Néanmoins, il n'existe pas à ma connaissance d'analyse des contenus d'information ESG hors rapports RSE annuels. Ces derniers ne représentent pourtant qu'une part très faible des informations extra-financières des entreprises (voir chapitre 4). Il est également très intéressant d'étudier les caractéristiques lexicales des titres des publications[20] des informations ESG dont nous disposons, car leur spectre est bien plus large et permettent l'exploration de nouvelles questions, au confluent des dimensions de la RSE, finance, communication, enjeux, acteurs, etc.

A cette fin, cette étude utilise plusieurs catégories lexicales issues du dictionaire General Inquirer, disponible en ligne et largement utilisé dans cette littérature, qui contient notamment les dictionaires Harvard IV-4 et Lasswell. Il faut noter qu'il n'inclut que les mots en anglais, ce qui exclut environ un tiers des informations obtenues après filtrage. L'analyse lexicale consiste ici à compter, pour le titre de chaque publication, le nombre de mots contenus qui correspondent au champ lexical des catégories testées (positif, légal, abstrait, etc., voir tableau 1.13 pour leur définition). Un titre peut contenir 0, 1 ou plusieurs termes se rattachant à chaque catégorie lexicale. Les variables lexicales ainsi créées sont par la suite agrégées par évènement, caractéristique d'évènement, source, ou en panel. Elles rendent possibles les tests des hypothèses posées précédemment ou nourissent les études menées dans les chapitres suivants.

La première question posée permet un contrôle préalable. Les informations positives ont-elles

20. Et non les textes en eux-même car leur traitement est bien plus coûteux en temps de calcul. Mais ceux-ci peuvent être intéressants pour mener des analyses plus précises ou traitant davantage de variables lexicales, nécessitant donc un volume textuel plus important.

un ton plus positif et moins négatif que les négatives et vice-versa ? Oui, le ton correspond à l'information (voir graphique 1.6). On compte en moyenne 0.42 mot à tonalité positive par évènement ESG positif, contre 0.22 par évènements négatif. A l'inverse, on a 0.13 mot négatif par évènement positif contre 0.26 par négatif. Comme on peut l'observer dans les tableaux 1.6 et 1.7, cette distinction est valable pour les trois critères E, S et G.

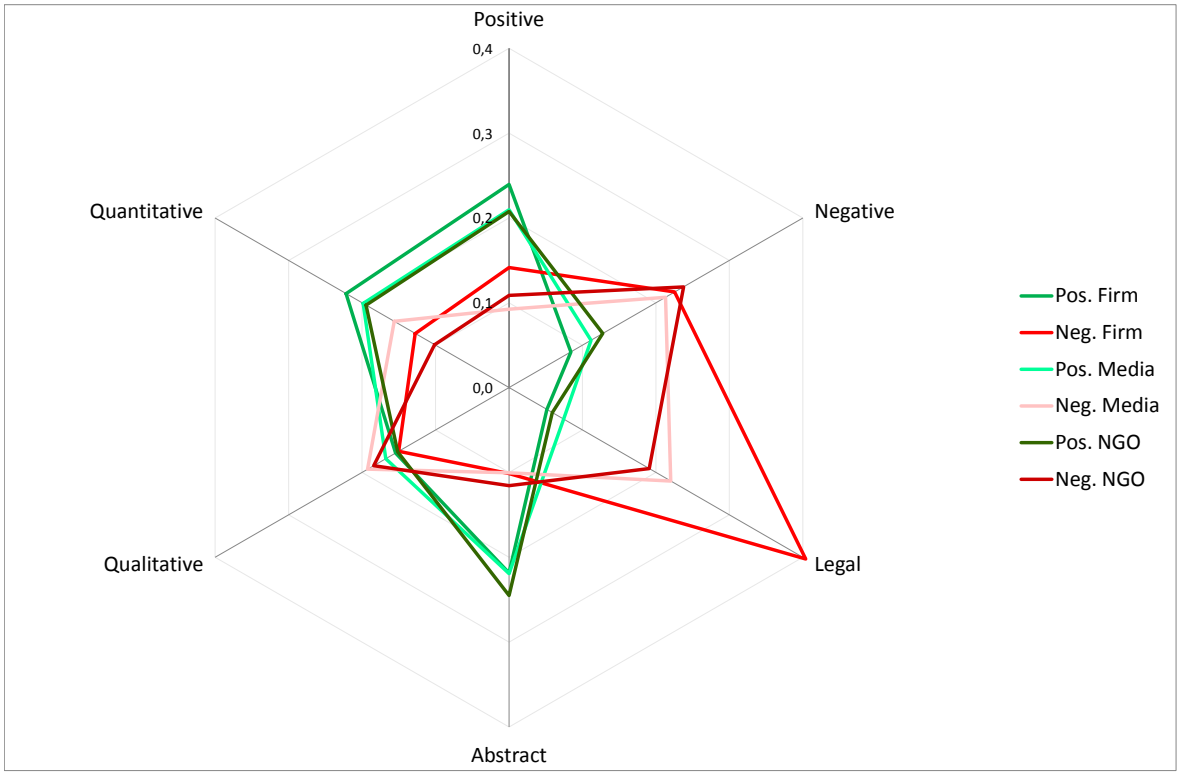


FIGURE 1.6 – **Lexique utilisé par les firmes, médias et ONG, pour les articles positifs et négatifs.**

La communication des firmes est-elle différente des autres, est-elle notamment plus positive, abstraite, ou identifiée communication ? C'est à nuancer. Sans surprise, elle utilise d'abord plus de termes positifs que les autres sources pour les informations négatives (+24% critères ESG confondus) et dans une moindre mesure pour les informations positives (9%). Rappelons que les informations positives sont seize fois plus nombreuses que les négatives (159 évènements) parmi

les publications des entreprises. Parmi les informations négatives, les termes légaux sont surtout présents dans les publications d'entreprise (+49%). La publication d'informations négatives de la part des entreprises semble donc lexicalement liée à la loi. On constate la tendance inverse pour les informations positives où les médias adoptent un lexique plus légal que les entreprises. Les informations négatives publiées par les firmes ont également un ton plus économique, et lié à la communication, que les autres sources. Dans lignée des résultats d'Agarwal et Kolev (2012), qui montrent que les managers repoussent les annonces de licenciement en fonction d'annonces conjoncturelles négatives et de leurs concurrents, il serait intéressant de tester si le timing de la publication d'informations ESG négatives est motivé par le besoin de relativiser de mauvais résultats grace à des explications de conjoncture économique. En effet, cela expliquerait la surpondération des termes économiques par les firmes pour les informations négatives.

TABLE 1.6 – **Analyse de texte : catégories lexicales par source et score.**
Les deux dernières colomnes indiquent le nombre moyen de mots par titre d'article ESG, pour toutes les sources. Les 6 premières colomnes présentent la différence entre le nombre moyen de mots par titre et par source, en %. La comparaison entre sources s'effectue séparément pour les informations positives et négatives.

Catégorie	Entreprise		Média		ONG		# Total	
Lexicale	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.
				Tous critères ESG				
Positive	9%	24%	-4%	-19%	-5%	-5%	0,42	0,22
Negative	-22%	0%	4%	-5%	18%	5%	0,13	0,26
Active	0%	8%	1%	-8%	0%	1%	0,44	0,38
Legal	-16%	49%	21%	-19%	-4%	-30%	0,02	0,08
Economic	-1%	18%	-5%	-22%	6%	5%	0,53	0,47
Passive	-8%	-9%	8%	-2%	0%	11%	0,06	0,08
Abstract	-4%	-4%	-4%	-5%	8%	9%	0,20	0,09
Qualitative	-2%	-14%	6%	10%	-4%	5%	0,02	0,03
Quantitative	8%	-1%	-3%	22%	-5%	-21%	0,13	0,08
Communication	0%	29%	-8%	-13%	9%	-16%	0,14	0,12

Données : Covalence-Ethicalquote, calculs de l'auteur.

On observe donc des différences d'utilisation de champ lexical entre les publications des trois sources d'information ESG et et entre les types (score/critère) des évènements traités. Après avoir examiné l'impact des évènements et des sources sur le contenu des titres, il semble intéressant d'explorer les dimensions géographiques du lexique des publications ESG.

TABLE 1.7 – **Analyse de texte : catégories lexicales par source, score et critère ESG.**
Les deux dernières colomnes indiquent le nombre moyen de mots par titre d'article ESG, pour toutes les sources. Les 6 premières colomnes présentent la différence entre le nombre moyen de mots par titre et par source, en %. La comparaison entre sources s'effectue séparément pour les informations positives et négatives.

Catégorie	Entreprise		Média		ONG		# Total	
Lexicale	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.
				Environnement				
Positive	-5%	62%	4%	-32%	0%	-30%	0,32	0,27
Negative	-39%	-4%	12%	-10%	26%	14%	0,12	0,28
Active	-18%	23%	11%	-25%	8%	2%	0,43	0,41
Legal	-29%	31%	49%	-34%	-19%	3%	0,02	0,05
Economic	-1%	19%	6%	-26%	-6%	7%	0,42	0,46
Passive	-16%	-51%	16%	5%	1%	47%	0,05	0,06
Abstract	-7%	-31%	-7%	-12%	14%	43%	0,20	0,11
Qualitative	-9%	42%	1%	-13%	8%	-29%	0,03	0,05
Quantitative	-7%	-28%	-6%	17%	13%	12%	0,12	0,07
Communication	-3%	33%	1%	-27%	3%	-6%	0,12	0,11
				Social				
Positive	14%	24%	-3%	-14%	-11%	-10%	0,45	0,20
Negative	-18%	-6%	2%	-15%	16%	22%	0,13	0,27
Active	5%	3%	1%	-6%	-6%	3%	0,43	0,34
Legal	-29%	-42%	20%	3%	9%	39%	0,02	0,04
Economic	1%	23%	-9%	-25%	8%	2%	0,56	0,48
Passive	-11%	-52%	0%	15%	11%	37%	0,06	0,07
Abstract	10%	-7%	-10%	-4%	1%	11%	0,20	0,09
Qualitative	4%	-51%	-3%	9%	-2%	42%	0,02	0,02
Quantitative	23%	1%	-13%	13%	-10%	-13%	0,14	0,09
Communication	0%	22%	-13%	-16%	12%	-6%	0,13	0,11
				Gouvernance				
Positive	14%	9%	-4%	-13%	-9%	4%	0,44	0,23
Negative	-22%	1%	4%	0%	18%	-2%	0,12	0,26
Active	3%	1%	0%	-4%	-2%	3%	0,46	0,36
Legal	2%	73%	11%	-22%	-13%	-51%	0,02	0,12
Economic	1%	18%	-1%	-16%	0%	-2%	0,59	0,46
Passive	4%	31%	7%	-9%	-11%	-22%	0,07	0,09
Abstract	-4%	13%	9%	-6%	-4%	-7%	0,19	0,09
Qualitative	-2%	9%	17%	3%	-16%	-13%	0,02	0,03
Quantitative	-7%	8%	22%	23%	-15%	-32%	0,10	0,09
Communication	5%	38%	-15%	-10%	10%	-27%	0,16	0,14

Données : Covalence-Ethicalquote, calculs de l'auteur.

Lexique et géographie

Tout d'abord, le contenu lexical d'une publication ESG dépend-il de la provenance de sa source, où du pays où a lieu l'évènement traité ? Une étude plus approfondie des déterminants géographiques et économiques du lexique utilisé, pour les publication RSE ou autres, serait intéressante. Nous la laissons néanmoins de côté pour le moment et présentons de premiers faits stylisés sur la cartographie mondiale des champs lexicaux de la RSE.

Pour chaque type de source, les critères lexicaux susceptibles de plus fortement varier entre les pays diffèrent. Les publications médiatique semblent avoir un contenu plus économique (voir carte 1.17) et quantitatif (voir carte 1.7) dans les pays du Nord que dans ceux du Sud.

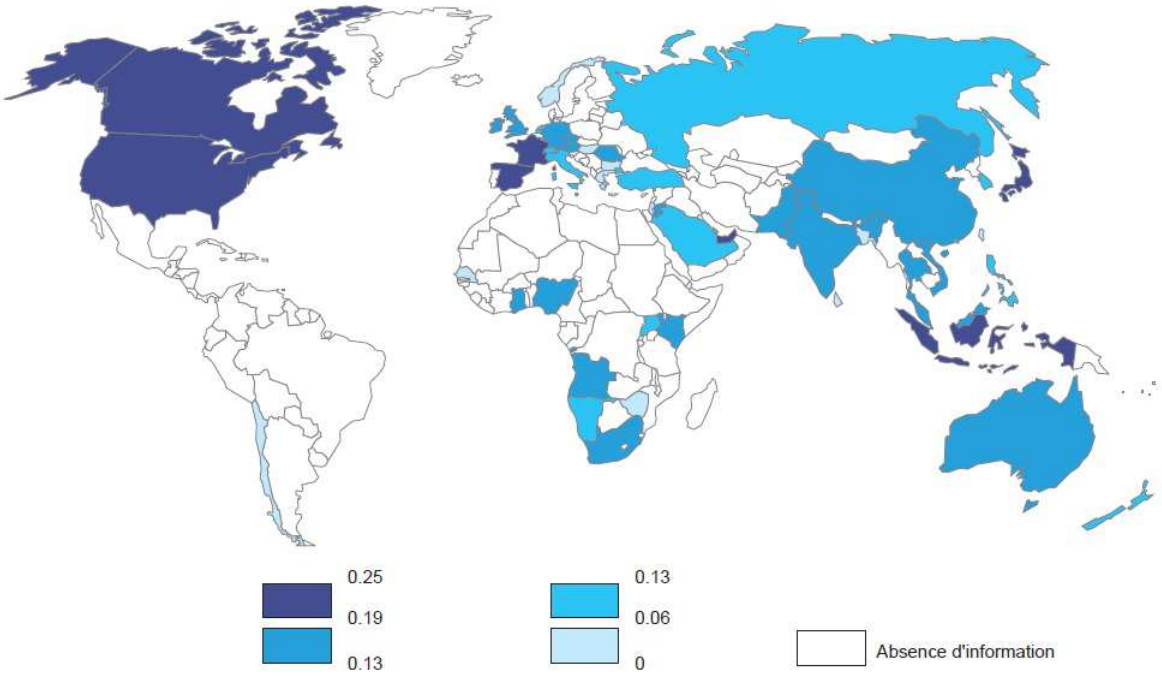


FIGURE 1.7 – **Lexique quantitatif des médias par pays** : nombre moyen de mots appartenant au champ lexical de la quantité par publication médiatique. Les pays ayant moins de 10 publications médiatiques recensées sont exclus.

Les publications ESG des entreprises relèvent plus du champ lexical de la communication que les autres sources, comme nous l'avons vu précédemment. Mais au sein des publications d'entreprise, y a-t-il des pays où les firmes utilisent d'autant plus ce lexique ? Les résultats, présentés

en carte 1.8, montrent une surutilisation de ce registre en Suisse particulièrement (0.72 terme de communication par titre de publication), suivi de la France et de la Suède.

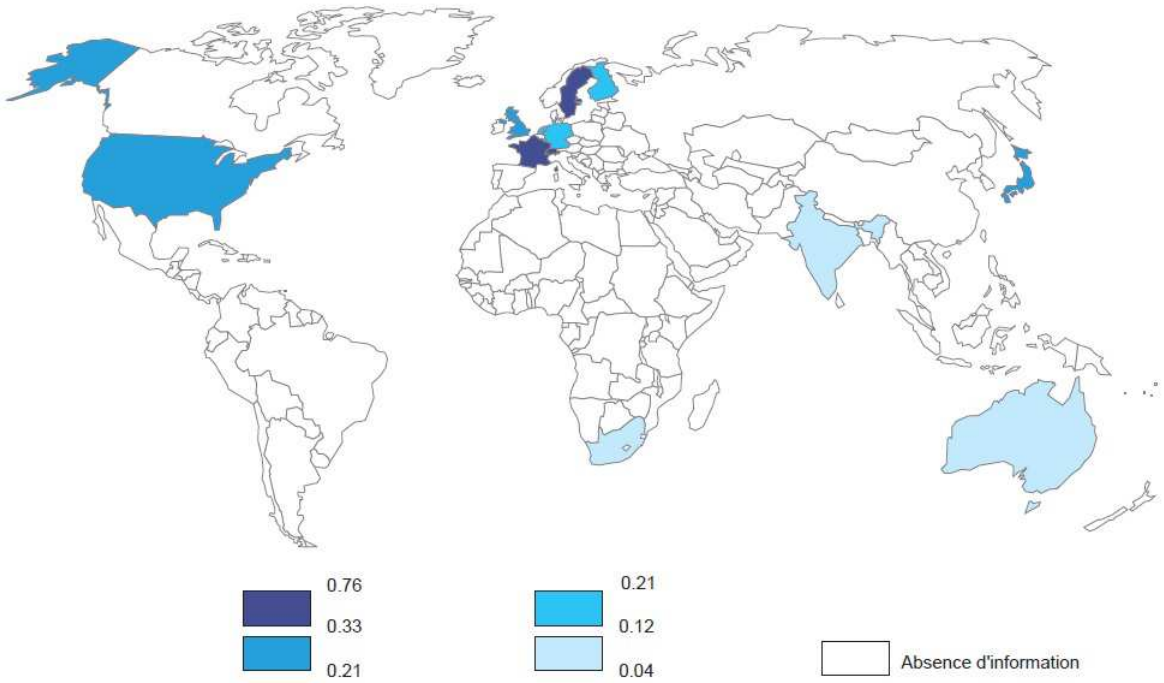


FIGURE 1.8 – **Lexique de la communication dans les publications d'entreprise par pays** : nombre moyen de mots appartenant au champ lexical de la communication par publication d'entreprise. Les pays ayant moins de 10 publications d'entreprise recensées sont exclus.

Enfin, suivant la distinction entre les ONG à démarche partenariale avec les entreprises et celles dont l'objectif est plutôt de dénoncer les évènements ESG négatifs, nous présentons deux cartes du ton des publications des ONG. La première, carte 1.9, présentant le nombre moyen de termes négatifs par titre, montre que les "bad cops", ou en tout cas les ONG qui adoptent un ton plus négatif sur les informations de RSE, se trouvent plutôt en Europe.La seconde, carte 1.18 présentant le niveau de positivité du ton des titres, nuance ce résultat.

Les contenus lexicaux des publications ESG dépendent de leurs sources et du pays de celles-ci. On peut aussi se demander si plus les informations sont lointaines, plus elles sont abstraites ou plus elles relèvent du champ lexical de la communication. Le tableau 1.8 confirme cette in-

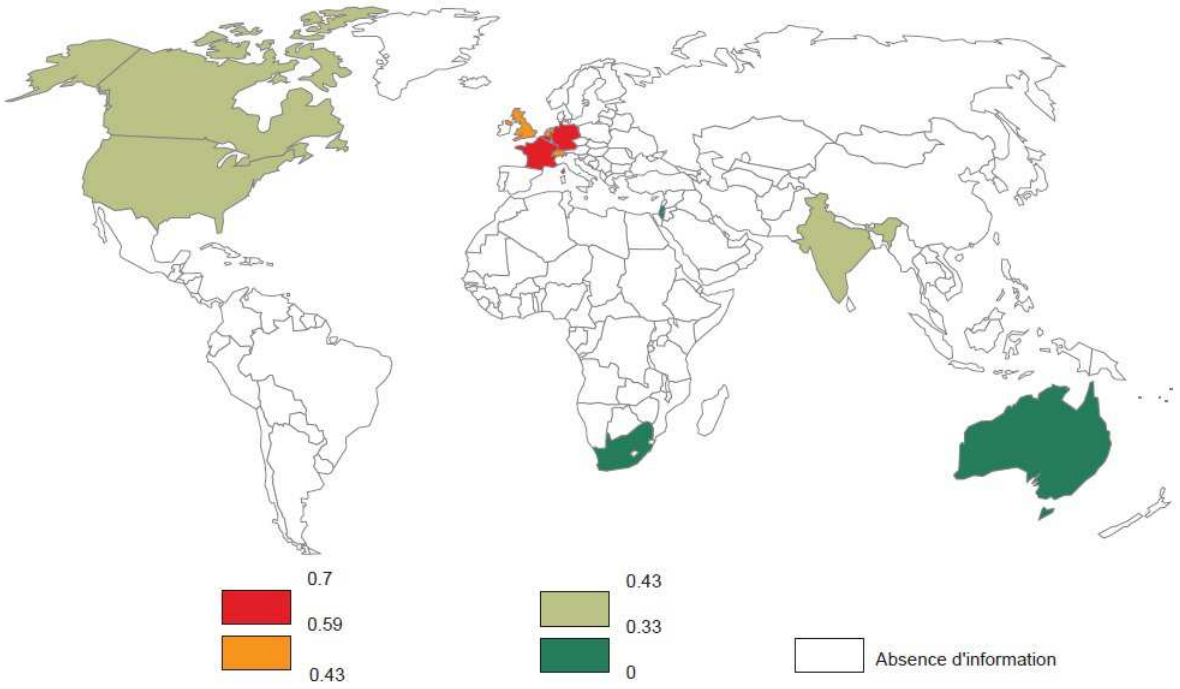


FIGURE 1.9 – **Lexique négatif des ONG par pays** : nombre moyen de mots ayant un lexique négatif par publication d'ONG. Les pays ayant moins de 10 publications d'entreprise recensées sont exclus.

tuition, mais les informations ESG lointaines utilisent également davantage le vocabulaire de la quantification. Quand on sélectionne les informations médiatiques, cette tendance se renforce. Pour celles-ci, plus les informations contiennent des termes économiques ou légaux, moins il y a de chance qu'elles correspondent à des informations lointaines.

Comme l'indique le tableau 1.9, plus un titre a un profil lexical négatif ou qualititatif, plus haute est la probabilité que l'évènement se produise dans un pays partageant la même langue officielle que le siège de l'entreprise concernée. A l'inverse, plus un titre est abstrait, quantitatif ou de communication, moins haute est cette probabilité, particulièrement pour les informations médiatiques.

Ces quelques faits stylisés montrent bien la diversité -et la complexité- de la RSE. Sa définition varie en fonction de ses sources, des secteurs, de paramètres géographiques, voire institutionnels. De plus en plus affichée par les firmes et présente dans les médias, la part des informations divulguées par les ONGs a tendance à diminuer. L'analyse du contenu lexical des communications

Table 1.8 – **Distance et contenu lexical des évènements**

Régressions MCO : distance entre lieu d'occurrence d'un évènement et siège de l'entreprise en fonction des catégories lexicales du contenu des titres des articles.

Catégorie	Tous	Pos.	Neg.	Firme	Média	ONG
Positive	-.006	-.001	.027	-.015	.009	-.070
	(.009)	(.010)	(.019)	(.028)	(.010)	(.033)**
Negative	.026	.022	-.007	-.004	.013	.087
	(.012)**	(.018)	(.018)	(.058)	(.013)	(.028)***
Active	-.008	.0008	-.016	.016	-.011	-.004
	(.008)	(.010)	(.014)	(.031)	(.009)	(.027)
Passive	-.024	.053	-.140	-.007	-.027	-.075
	(.020)	(.026)**	(.032)***	(.083)	(.021)	(.065)
Economic	.016	.026	.004	.004	.026	-.039
	(.007)**	(.009)***	(.012)	(.023)	(.007)***	(.021)*
Legal	.051	-.011	.032	-.039	.052	.193
	(.023)**	(.039)	(.028)	(.095)	(.025)**	(.056)***
Communication	-.044	-.039	-.047	-.096	-.045	.025
	(.016)***	(.021)*	(.025)*	(.055)*	(.017)***	(.043)
Abstract	-.045	-.045	.008	-.066	-.045	-.037
	(.013)***	(.015)***	(.025)	(.044)	(.014)***	(.045)
Qualitative	.043	-.010	.074	-.250	.048	.046
	(.027)	(.039)	(.035)**	(.129)*	(.028)*	(.081)
Quantitative	-.069	-.062	-.086	-.136	-.052	-.147
	(.013)***	(.016)***	(.023)***	(.042)***	(.014)***	(.054)***
Const.	8.213	8.141	8.335	8.144	8.187	8.530
	(.010)***	(.013)***	(.016)***	(.043)***	(.010)***	(.030)***
Obs.	29354	18933	10421	1961	25402	2209
F statistic	7.369	4.122	5.059	2.539	5.165	3.94

Les écarts-types sont donnés entre parenthèses. Une, deux, ou trois astérisques indiquent une significativité supérieure à 10-, 5-, et 1-poucents, respectivement.

Table 1.9 – **Langue commune et contenu lexical des évènements**

Régressions probit : probilité de langue commune entre lieu d'occurrence d'un évènement et siège de l'entreprise en fonction des catégories lexicales du contenu des titres des articles.

Catégorie	Tous	Pos.	Neg.	Firme	Média	ONG
Positive	.013	.027	.051	-.012	.024	.007
	(.011)	(.013)**	(.023)**	(.035)	(.012)**	(.045)
Negative	.091	.067	.055	.140	.070	.230
	(.014)***	(.022)***	(.020)***	(.066)**	(.015)***	(.042)***
Active	.013	.004	.038	-.009	.017	-.039
	(.010)	(.013)	(.017)**	(.037)	(.011)	(.037)
Passive	-.037	.003	-.093	.003	-.027	-.211
	(.025)	(.033)	(.038)**	(.095)	(.026)	(.089)**
Economic	-.015	-.012	-.013	-.015	-.006	-.045
	(.009)*	(.011)	(.015)	(.027)	(.009)	(.029)
Legal	.011	-.042	-.032	-.088	.015	.127
	(.027)	(.055)	(.032)	(.107)	(.029)	(.084)
Communication	-.077	-.095	-.057	-.116	-.083	-.037
	(.020)***	(.026)***	(.031)*	(.070)*	(.022)***	(.064)
Abstract	-.074	-.084	-.003	-.138	-.078	-.027
	(.017)***	(.020)***	(.032)	(.056)**	(.018)***	(.059)
Qualitative	.372	.286	.441	.089	.389	.214
	(.032)***	(.045)***	(.048)***	(.140)	(.035)***	(.117)*
Quantitative	-.050	-.036	-.077	-.050	-.051	-.002
	(.017)***	(.021)*	(.031)**	(.058)	(.019)***	(.073)
Const.	-.698	-.748	-.617	-.779	-.706	-.582
	(.012)***	(.016)***	(.020)***	(.052)***	(.013)***	(.043)***
Obs.	29354	18933	10421	1961	25402	2209
Log Likelihood	-16263.94	-10041.18	-6166.648	-957.566	-14083.03	-1314.176

Les écarts-types sont donnés entre parenthèses. Une, deux, ou trois astérisques indiquent une significativité supérieure à 10-, 5-, et 1-poucents, respectivement.

des différents acteurs permet de mieux comprendre leurs différences de compréhension des enjeux de la RSE. Ces enjeux sont entendus différemment de par le monde. La distance les distord, ce qui induit notamment des nuances dans les stratégies de communication des firmes, des médias et des ONGs.

1.5 Conclusion

1.5.1 Contributions

Les problématiques environnementales, sociales et de bonne gouvernance d'entreprise dessinent un prisme aux facettes multiples et interdépendantes. Ses enjeux sont forts mais incertains, ses aspirations croissantes bien que mouvantes, ses acteurs ont des intérêts intrinsèques possiblement divergents. La RSE a été maintes fois étudiée en économie, principalement sur son impact financier. Si sa littérature est déjà prolifique, nombreuses restent les zones d'ombre à explorer, car son émergence est récente et sa définition encore instable. Cette thèse pose de nouvelles questions et contribue à la compréhension de ses enjeux, ses acteurs, son évaluation, ses stratégies de communication, ainsi que son impact sur la performance financière des entreprises multinationales.

Comment définir la RSE ? Ou tout du moins, quels sont les déterminants de l'appréhension de la RSE par ses différents acteurs ? Après avoir discuté des théories du bienfondé de la RSE et de son endogénéité, la première partie fournit plusieurs faits stylisés sur les sources de la RSE, leurs localisations, leurs lexiques propres. Elle s'intéresse également à l'évolution temporelle des informations ESG, ainsi qu'aux spécificités géographiques des enjeux E, S ou G, ébauche d'une cartographie de la RSE. Ce constat empirique de l'hétérogénéité de la définition même de la RSE impose de soulever la question de son mode d'évaluation.

La notation extra-financière des entreprises est utilisée par les parties-prenantes mais aussi par les investisseurs financiers responsables. Définissant des indices de performance ESG, les processus de notation sont même en partie constitutifs de la définition de la RSE. Cette question est donc primordiale. Après avoir discuté de la question de la compatibilité des objectifs finan-

ciers et extra-financiers, ainsi que des possibilités de comparaison des critères ESG, le deuxième chapitre examine cette problématique et précise les enjeux spécifiques à chaque secteur d'activité en fonction du regard de chacun des acteurs. Les trois grands critères : Environnement, Social et Gouvernance (ESG), n'ont pas une importance égale pour chacun des secteurs d'activité. Ainsi la gouvernance est un enjeu de RSE prépondérant pour l'activité directe des banques [21]. En revanche, l'environnement est fortement impacté par l'activité des entreprises du secteur pétrolier par exemple. Nous montrons que cette évaluation n'est pas triviale et soulève des questions du type paradoxe de Condorcet (la présence de plusieurs critères d'évaluation peut engendrer une non transitivité des choix). Partant du principe que la perception de ces enjeux est différente selon les sources d'information, nous interrogeons la possibilité d'objectivisation de la fonction d'utilité des firmes. Nous soulignons notamment que l'hypothèse d'équipondération des critères ESG doit être dépassée. Mais il semble encore plus important d'adapter le système de notation des entreprises par secteur d'activité, car ceux-ci ont des enjeux spécifiques. Outre son apport théorique étayé par des faits stylisés, cette étude propose un système original de pondération sectorielle des critères ESG. En affinant la notation extra-financière des entreprises, elle peut permettre d'améliorer la pertinence des choix de porte-feuilles des investisseurs responsables en fonction de leurs critères propres.

Après l'analyse des enjeux et de la notation, ce travail se penche sur les stratégies de communication RSE des entreprises. La divulgation d'informations ESG des firmes, médias et ONGs, y est pensée de façon endogène. En particulier, il y est montré que les entreprises réagissent aux informations externes concernant leurs activitiés extra-financières. Mais pour analyser correctement leurs réactions, il faut prendre en compte les résultats précédents sur l'importance spécifique des critères ESG. Quand elles sont attaquées, par une source externe, sur l'un des critères ESG, les entreprises défendent leur crédibilité en faisant profil-bas, frontalement. En effet, cette défense ne se constate que sur le critère attaqué. Ainsi, les entreprises communiquent moins sur l'environnement lorsque les médias leur reprochent une mauvaise performance environnementale. Mais simultanément, par contournement, les entreprises contre-attaquent. Par

21. Les questions d'impact indirect des prêts et placements financiers des banques sur l'environnement via les activités des bénéficiaires sont très complexes, et n'ont principalement été soulevées que récemment, après 2010, dernière année inclue dans la base Covalence Ethicalquote. C'est pourquoi ces questions, bien qu'importantes, ne seront pas traitées ici.

exemple, elles communiquent davantage sur l'environnement lorsqu'elles sont décriées sur le critère social, surtout si ce dernier est un enjeu sectoriel majeur. Les entreprises adoptent d'ailleurs des stratégies combinées identiques face aux informations divulguées par des sources externes sur les activitiés de leurs concurrents. Ces résultats confirment l'intuition du bypass-washing, extension du concept de greenwashing où les différentes facettes de la RSE permettent aux firmes de masquer la visibilité de leurs contre-attaques visant à redorer leur blason réputationnel. En outre, les entreprises réagissent également aux publications RSE diffusées par leurs concurrents. Quand ces derniers communiquent fortement sur leur critère sectoriel majeur, les entreprises ont un comportement moutonnier sur ce critère. Parallèlement, on constate un effet de passager clandestin sur les publications sectorielles concernant les enjeux ESG mineurs. Plus les concurrents en divulguent, moins une entreprise communique sur sa RSE. Enfin, nous soulignons que la communication ESG des entreprises est à double tranchant. En effet, sur les critères sectoriels majeurs, l'hypothèse d'efficacité des relations publiques est vérifiée, tout comme celle du boomerang. Plus une entreprise divulgue d'informations positives sur ces critères, plus elle recevra d'informations positives, mais aussi négatives, de la part des ONG. En revanche, les divulgations des entreprises sur des critères ESG mineurs ont tendance à diminuer les attaques médiatiques sur ces questions. Enfin, nous démontrons que les deux grands types d'ONG interagissent. Ainsi, non seulement les bad cops réagissent aux divulgations des good cops en exerçant un effet boomerang indirect sur les entreprises, mais les seconds sont également prompts à mettre en lumière les bonnes pratiques des firmes fortement attaquées par les bad cops.

Après avoir apporté un nouvel éclairage sur les enjeux de la RSE, l'évaluation de sa performance, puis sur les déterminants des choix de stratégie de divulgation d'informations ESG, l'analyse se focalise sur l'impact de ces informations. Si les entreprises souhaitent influencer la divulgation d'informations des médias et des ONGs, peuvent-elles influencer par ce biais leur performance financière ? La réponse est non, pas directement. Mais nous nous intéressons plus généralement à l'impact de la divulgation d'informations ESG -pas seulement par les firmes, mais aussi les médias et les ONGs- sur la performance financière des entreprises. Si cette question a déjà été moult fois traitée dans la recherche académique, l'impact de petits évènements RSE (hors catastrophes majeures) n'était pas encore possible au vu des données utilisées par le

passé. A cette fin, nous conduisons une étude d'évènements, méthode très largement répandue en finance, dont le but est de définir des rentabilités anormales associées à la divulgation d'évènements. Parmi les informations relatives à la RSE, seules les informations négatives divulguées par les médias ont un impact significatif (négatif) sur la performance financière, entendue ici en termes de rentabilité des actions boursières. C'est le premier apport de ce chapitre. Autrement dit, le bâton est mieux pris en compte que la carotte, et les informations divulguées par les ONG ou les entreprises n'ont pas d'impact significatif, ou en tout cas sont mieux anticipées par les marchés. Puis nous régressons les rentabilités anormales correspondant aux informations susdites sur différentes variables afin de mieux comprendre les déterminants de la corrélation entre performance sociale (CSP) et performance financière (CFP) des entreprises.

Trois résultats significatifs et robustes accentuent la contribution de ce travail. Soumise à controverse académique, l'hypothèse du *goodwill* est vérifiée. Les entreprises ayant une bonne réputation subissent, toutes choses égales par ailleurs, des pertes moins lourdes lors d'évènements négatifs. En revanche, la proximité culturelle entre le pays mère d'une entreprise et le lieu d'occurrence d'un évènement la concernant, mesurée par une langue officielle commune, accroît ces pertes. Loin des yeux, loin du coeur. Enfin, le contenu lexical de l'information modifie l'étendue de la réaction des marchés. En effet, une information négative au contenu quantitatif a un impact plus fort, alors qu'un contenu qualitatif le diminue. L'étude ne conclut pas clairement à une différence d'impact entre les informations dont l'enjeu est majeur pour un secteur (comme l'environnement pour les pétroliers) et les autres. Cependant, les déterminants de la réaction des marchés à ces types d'informations divergent. Ainsi, le contenu lexical influence fortement l'impact des informations négatives à enjeu sectoriel majeur, mais pas l'effet réputationnel. Par contre, ce dernier joue un rôle essentiel dans les pertes liées aux évènements négatifs à enjeu sectoriel mineur, mais uniquement en ce qui concerne la réputation sur ce critère mineur. Le *goodwill* n'est donc vérifié que frontalement pour les informations négatives à enjeu sectoriel faible. Il semble également que les informations divulguées par un média spécialisé dans la RSE aient moins d'impact, principalement sur ce critère. En moyenne, les informations médiatiques négatives provoquent donc des pertes pour les actionnaires, pas les autres. Une bonne réputation extra-financière, une faible proximité culturelle et un contenu lexical plus qualitatif que

quantitatif permettent de les atténuer. L'analyse séparée des déterminants de ces impacts selon l'importance sectorielle du critère concerné affine ces résultats.

1.5.2 Pistes de recherche

Cette thèse cherche humblement à poser de bonnes questions sur la RSE et à y répondre en utilisant des données originales. L'objectif est d'ouvrir de nouvelles perspectives de compréhension de ses tenants et aboutissants. Bien sûr, il reste bien des sujets connexes à examiner. Dans un futur proche, je souhaite approfondir certains aspects peu ou pas étudiés de la RSE, en particulier les impacts des paramètres institutionnels ou macroéconomiques de sa localisation, des processus de détermination de la réputation extra-financière par le contenu lexical des informations ESG et les stratégies optimales d'investisseurs socialement responsables (ISR).

Comme développé dans le premier chapitre, la définition de la RSE diffère selon les pays et leurs sources d'information, selon les poids des préoccupations ESG et selon la puissance relative des entreprises, des médias ou des ONG. Placer la RSE dans un monde globalisé impose cette interrogation : est-ce que les caractéristiques institutionnelles (type de droit, type de régime politique, liberté de la presse, etc.) ou macroéconomiques (PIB, taux d'ouverture commerciale, etc.) influencent les stratégies de communication des entreprises, des ONG et des médias ? Que cela nous dit-il sur une définition universelle de la RSE ? Les articles traitant du lien entre les stratégies de localisation et les stratégies RSE des entreprises multinationales (Hettige et al., 1996, Dasgupta et al., 2000 et Seroa de Motta, 2006) ne montrent pas clairement que la performance sociale et environnementale des firmes multinationales dans les pays en développement soit touchée par l'aspiration à la RSE des consommateurs situés dans les pays développés. Mais ils soulignent le rôle des caractéristiques des communautés locales. Il semble intéressant de croiser les informations Covalence-Ethicalquote avec des données commerciales entreprise et des variables spécifiques à chaque pays. Cela permet en effet de tester les liens entre enjeux commerciaux d'implantation des entreprises, contexte macroéconomique et institutionnel de cette localisation et stratégies de communication des entreprises, médias et ONGs.

La mesure de la réputation extra-financière d'une entreprise est une tâche délicate (voire

chapitre 4). Au-delà de l'évaluation de sa performance ESG, discutée dans le premier chapitre, il est nécessaire de prendre en compte des paramètres psychologiques, tels que la théorie des perspectives de Kahneman et Tversky (1979). En effet, les différents acteurs sensibles à cette réputation évaluent ses variations relativement à des références subjectives et à son niveau présent de réputation. Cela rejoint le travail en cours de Barnett sur l'impact particulier d'évènements ESG fortement négatifs sur la réputation des entreprises. La construction de la réputation est donc probablement non-linéaire, asymétrique et peut-être soumise à des phénomènes d'hystérèse. L'analyse du contenu lexical des informations ESG semble être une bonne piste de test de telles hypothèses. La réputation inclut en effet une part d'affect, et celui-ci s'exprime notamment par l'intermédiaire de champs lexicaux. La variation de l'utilisation de ces derniers doit être corrélée avec la variation de la réputation d'une entreprise, elle même soumise aux évènements ESG la concernant, dans des conditions initiales qui lui sont propres. Le résultat attendu de cette étude est la mise en évidence empirique de ces phénomènes de non-linéarité, voire d'hystérèse dans les processus de détermination de la réputation extra-financière.

Enfin, prenant en considération les résultats précédents, ainsi que la littérature naissante sur le sujet (notamment Barnett et Salomon, 2006, Renneboog et al., 2008, et Capelle-Blancard et Monjon, 2012), il semble pertinent d'examiner les implications des stratégies d'Investissement Socialement Responsable (ISR). Pour faire simple, l'approche de filtrage sectoriel, où des investisseurs responsables se refusent d'investir dans certaines industries, s'y oppose à l'approche best-in-class, où des investisseurs choisissent d'inclure uniquement dans leur portefeuille les meilleures entreprises par secteur, compte tenu de leurs performances (ou efforts) ESG. Nonobstant les objectifs financiers, on peut considérer que les investisseurs cherchent à optimiser les incitations de réduction des dommages ESG causés par les activités des entreprises en fonction de leur environnement concurrentiel. Dans ce contexte, l'idée est de bâtir un modèle théorique, où les entreprises maximisent une fonction de profit compte tenu du coût de leurs efforts pour améliorer leur impact ESG, et du montant d'ISR qu'elles escomptent recevoir. Les dommages ESG générés par les entreprises dépendent de leurs efforts et de caractéristiques spécifiques à leurs industries, ce qui rejoint les résultats du chapitre 2. Les investisseurs responsables, quant à eux, souhaitent minimiser les dommages induits en fonction de leur choix de type d'investissement,

sous contrainte de budget. L'objectif est de mettre en lumière les implications stratégiques de l'ISR pour les entreprises en fonction de leur environnement concurrentiel, et surtout de mieux comprendre théoriquement les conséquences des stratégies d'investissement responsable sur leur efficience et leur efficacité environnementale et sociale.

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Annexes

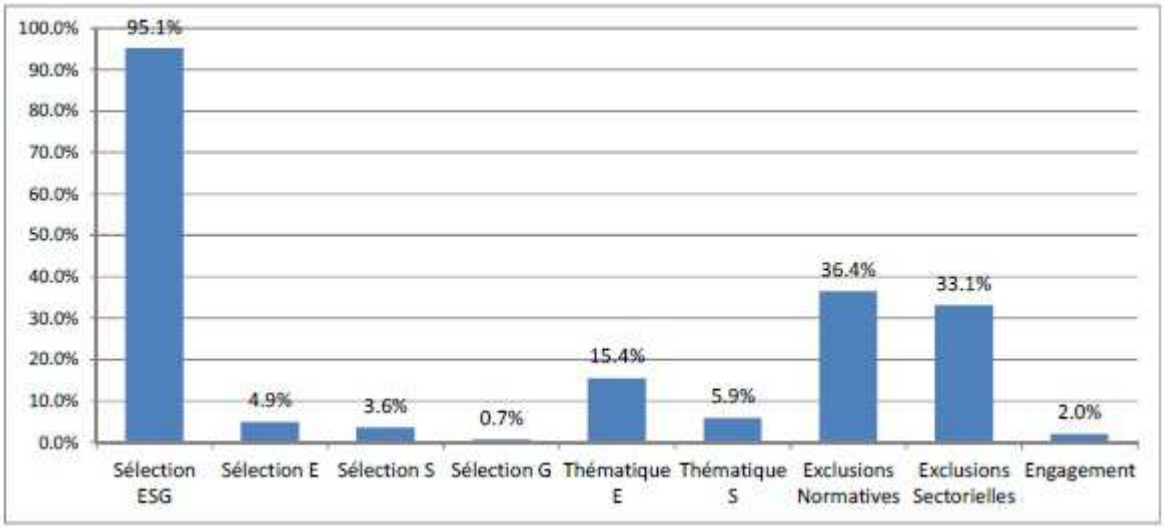

FIGURE 1.10 – **Types d'ISR en France, en nombre de fonds au 30 juin 2010, source : Novethic**.

TABLE 1.10 – **Exemples d'annonces ESG**

Cette table présente quelques exemples d'annonces ESG extraites de la base Covalence-Ethicalquote.

Bayer 01/03/2002 E(−), Media	"Bayer was one of several multinationals to export highly toxic obsolete pesticides to Nepal, and abandon them there after they reached their expiry date or were banned. (...) The obsolete pesticides had been inadequately stored in rusting and rotting original packaging (...). The toxic waste threatens the health of residents, workers and livestock in the area as well as local water supplies, irrigation systems and soil. Despite requests to Bayer from the Royal Nepalese Government, the company has refused to help."
Coca-Cola 08/12/2002 E(−), Media	"A Coca-Cola bottling plant in Kerala (India) gets its water from 60 wells the plant has drilled in the area. Local villagers claim this is draining their water supply and leaving what is left contaminated. (...) Protesting villagers want the plant closed but Coke says (...) they 'have not found any change in the water situation'."
Procter & Gamble 12/20/2004 S(+), NGO	"A new water purification product developed by Procter & Gamble is being launched in Haiti, where diarrhea is a major killer of children under 5, by an initiative funded by the Global Development Alliance of the U.S. Agency for International Development (USAID)."
Wal-Mart 11/14/2003 S(−), Media	"Wal-Mart, the world's biggest company and the largest employer in the US, is being taken to court by a group of former immigrant employees. The workers have accused the US supermarket chain of conspiring with cleaning contractors to employ them in conditions that were "one step away from slavery" (...) foreign workers have told of working seven-night, 56-hour weeks at the budget stores for as little $325, well below the national minimum hourly wage."
Riggs Bank 01/27/2005 G(−), NGO	"Riggs Bank pleaded guilty to helping former Chilean dictator Augusto Pinochet and the leaders of oil-rich Equatorial Guinea hide hundreds of millions of dollars. The federal judge questioned whether a $16 million fine agreed to by prosecutors was enough. U.S. District Judge Ricardo Urbina in Washington today asked whether the penalty is "just a business expense" that wouldn't even cover the profits Riggs made on the suspect accounts. (...)"

TABLE 1.11 – **Covalence-Ethicalquote : critères 1/2**

Criterion	Description	#	ESG	KLD	Sust.
Working conditions					
1. Labour standards	covers labour issues taking place within the company.	4546	S	Emp	Emp
2. Wages	looks at how the company manages the level of wages paid to employees and executives.	2269	S	Emp	Emp
3. Social benefits	looks at measures regarding social benefits and advantages for employees and families.	1519	S	Emp	Emp
4. Training and insertion	looks at how the company takes measures regarding training employees, continued formation, stabilisation of jobs and social plans in case of lay-offs.	1133	S	Emp	Emp
5. Women	describes working conditions for women and the coordination of professional and private life.	902	S	Div	Emp
6. External working conditions	covers working conditions outside the analyzed company.	2504	S	Emp	Emp
Impact of production					
7. Sales	describes how companie's sales benefit people and the environment.	142	G	Com	Com
8. Link with official development aid	highlights when a company collaborates with, or benefits from, a governmental development aid program.	252	G	Com	Com
9. Export risk guarantee	describes a situation when a government covers the risks taken by a national company investing abroad.	14	G		G
10. International presence	describes the impact of the company's foreign direct investments and related policies.	5825	G		G
11. Joint ventures	receives information about multinational companies investing together with local investors. to create a new company and the economic, social and environmental of such joint ventures.	2440	G	Com	Com
12. Economic impact	deals with how a company's investments influence local industries in terms of job creation, access to markets, competition, economic growth.	2924	G	Com	Com
13. Social impact	receives information on how the company's operations influence the implementation of local laws relating to social areas.	3516	S	Com	Com
14. Job stability	looks at the turn-over of the company's employees.	77	S	Emp	Emp
15. Local employees	looks at the number and the proportion of local employees in the company.	330	G	Com	Com
16. Local executives	looks at the number and the proportion of local executives in the company.	22	G	Com	Com
17. Women employed	looks at the proportion of women among the company's employees and executives.	228	G	Div	Emp
18. Downsizing	is used to code information that relates to factory closures, the transfer of production to another country, and measures taken to minimize negative social effects of such decisions.	3633	S	Emp	Emp
19. Infrastructures	describes when a company is (co-) financing public infrastrutures.	174	G	Com	Com
20. Local sourcing	highlights when a company is buying / sourcing directly to a local producer, farmer.	256	G	Com	Com
21. Stability of prices	describes how a company manages prices of raw materials on international commodity markets.	184	G		G
22. Technical assistance	highlights when a company transmits skills, knowledge, technologies to another company / partner.	475	G	Com	Com
23. Intellectual property rights	describes how a company manages its own intellectual propriety rights vis-a-vis other companies and countries.	867	G		G
24. Local innovation	highlights when a company helps another company to develop a new product.	136	G	Com	Com
25. Fiscal contributions	looks at the following questions : Does the company pay taxes ? Where ? How much ?	598	G	Com	Com
26. Environmental impact	highlights how a company's production activities are impacting the environment.	14129	E	E	E

TABLE 1.12 – **Covalence-Ethicalquote : critères 2/2**

Criterion	Description	#	ESG	KLD	Sust.
Impact of products					
27. Product human risk	describes when a product or service is perceived to be risky to man or nature.	2875	S	Pdt	Pdt
28. Product social utility	serves to describe when a company offers, or is being asked to provide, products or services that respond to needs related to human, social and economic development.	2464	S	Pdt	Pdt
29. Product relation to culture	describes the relation between a product and a culture.	220	G	Com	Com
30. Socially innovative product	reflect communications regarding the R & D of products or services that present a particular interest for responding to human needs and contributing to economic and social development.	1018	S	Pdt	Pdt
31. Product environmental risk	reflects communications found about a product or service described to be risky to nature and the environment by itself or by its implications.	4936	E	E	E
32. Waste management	describes action / lack of action in waste management.	4543	E	E	E
33. Eco-innovative product	covers information regarding new products or services that are environmentally friendly.	5862	E	E	E
34. Information to consumer	looks at how companies are, or aren't, providing the public and consumers with information.	7131	G	Pdt	Pdt
35. Pricing / needs	looks at which price does a company sell its products considering their social utility and capacity to respond to essential human needs.	1283	S	Pdt	Pdt
36. Cause related marketing	highlights when the support to social / environmental projects is linked to the selling of a product.	481	G	Pdt	Pdt
37. Social sponsorship	pertains to information about a company's donation of money or goods to an external organization in the pursuit of social or environmental objectives.	8763	S	Com	Com
Institutional impact					
38. Anti-corruption policy	covers material presenting how companies are acting, or failing to act, against corruption.	2773	G		G
39. Humanitarian policy	describes how a company behaves in and about emergency situations such as wars and natural disasters.	1268	G		HR
40. Human rights policy	is used to code information that pertains to how a company deals, or should deal, with the respect for, and promotion of human rights, internally and externally.	2581	G		HR
41. Relations with United Nations	describes how a company discusses and collaborates with programmes or agencies of the United Nations.	1683	G		G
42. Boycott policy	describes how a company deals with calls to boycott certain countries and governments because of the human rights situation.	736	G		HR
43. Social stability	describes when a company helps, or fails to help, promote local social stability.	3142	G	Com	G
44. Support to political actors	compiles information describing relations of a company with political actors, such as financial support.	878	G		G
45. Lobbying practices	covers material describing lobbying activities of companies : activities aiming at influencing decisions taken by governments at the national and international levels.	1391	G		G

La classification ESG inclut E pour Environment, S pour Social and G pour Governance. La classification KLD inclut : Emp pour Employees relations, Div pour Diversity, Com pour Community, Pdt pour Product et E pour Environment. La classification Sustainalytics (Jantzi) inclut les trois derniers critères, Emp pour Employees relations + Diversity et G pour Governance .

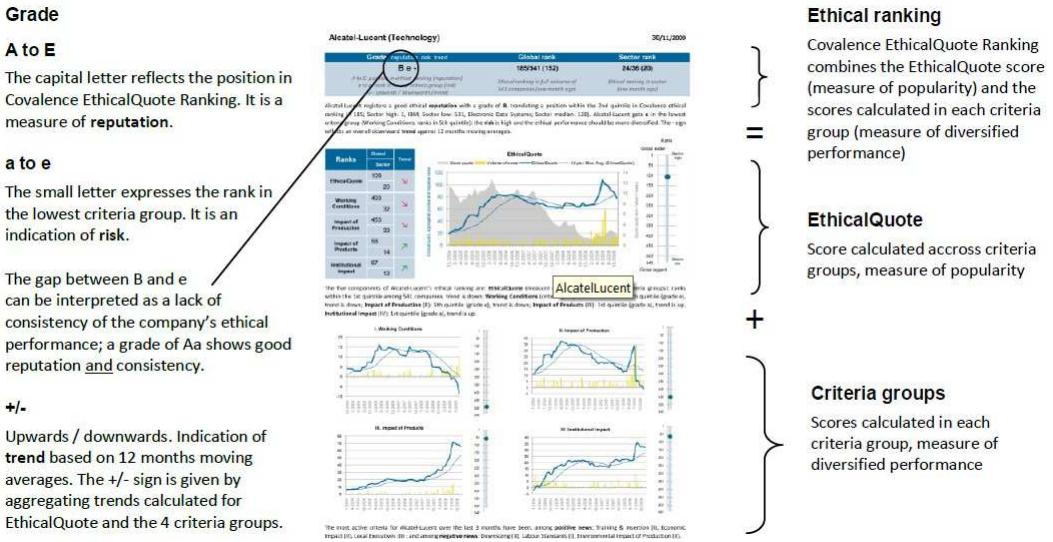

FIGURE 1.11 – **Exemple instantané d'un rapport mensuel de Covalence-Ethicalquote.**

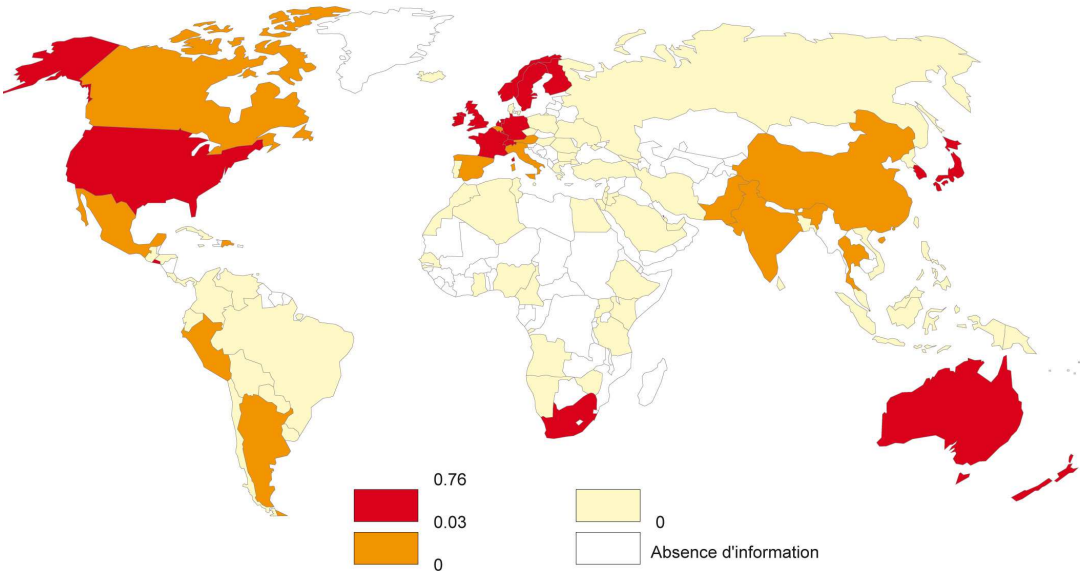

FIGURE 1.12 – **Part des informations positives internes dans le total des informations ESG publiées par les sources d'un pays.**

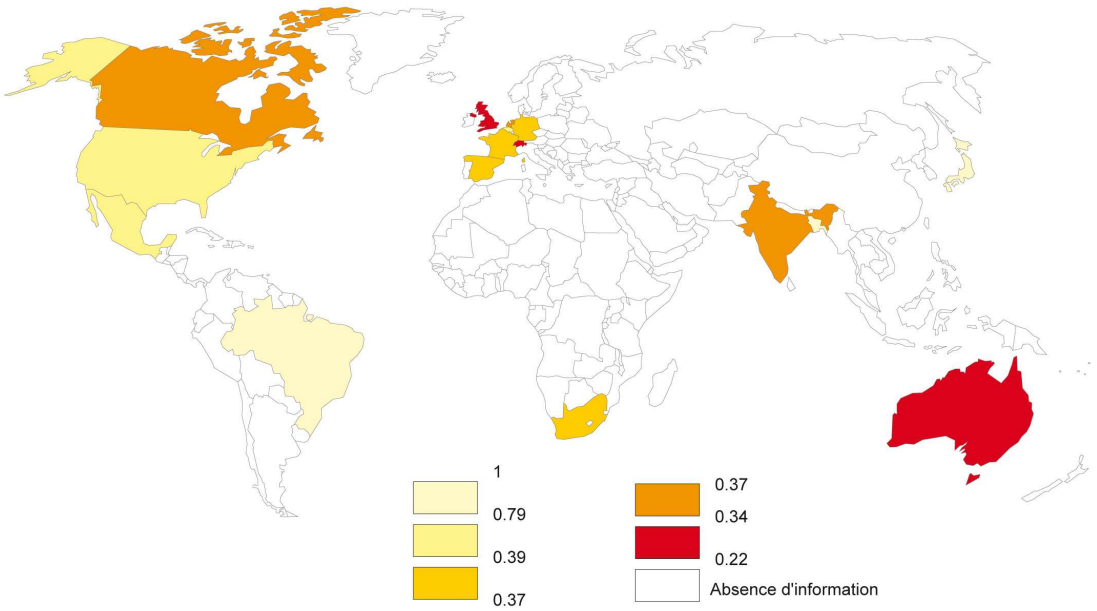

FIGURE 1.13 – **Part d'informations positives au sein des informations ESG publiées par les ONG d'un pays.**

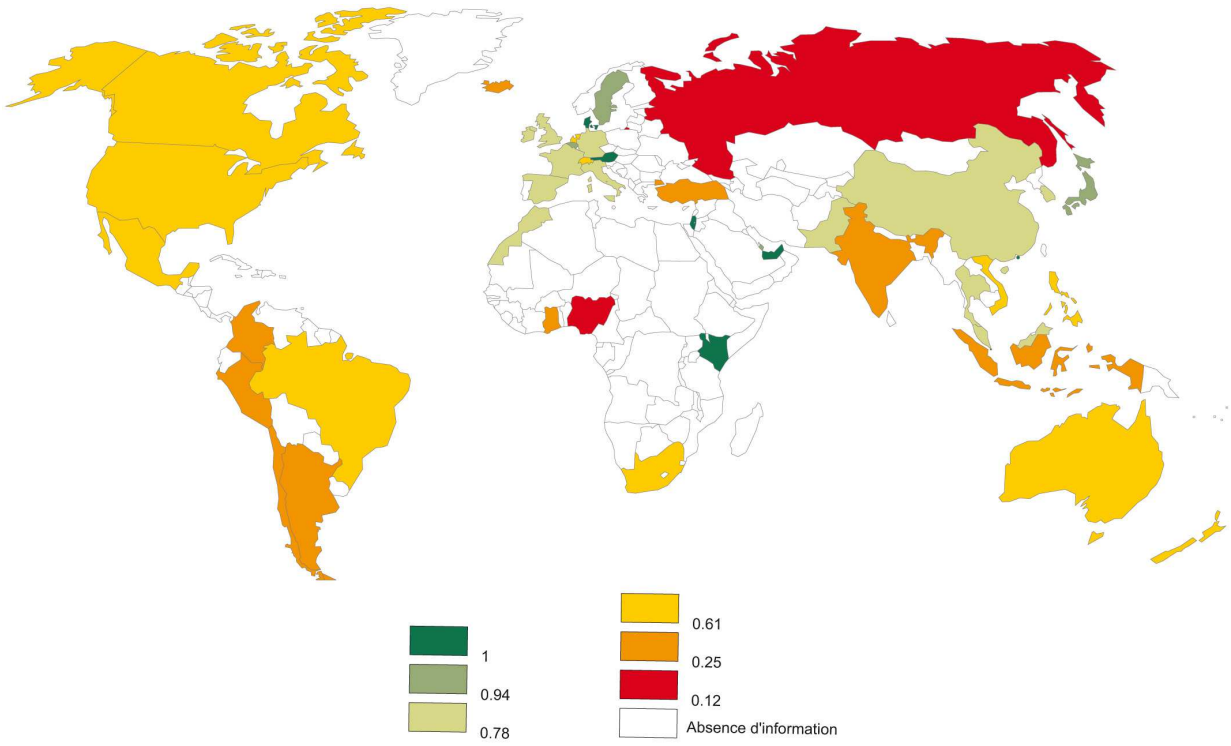

FIGURE 1.14 – **Réputation environnementale** (part des informations positives sur le total des informations) des pays, toutes sources confondues, entre 2002 et 2010. Les états ayant moins de 10 informations environnementales recensées ne sont pas considérés

TABLE 1.13 – **Catégories lexicales : définition et statistiques descriptives.**

Nombre de mots référencés par publication, toutes sources confondues Nombre total de publications : 93626, contenant information lexicale : 66873	**Moy.**	σ	**Min.**	**Max.**
Positif : *Positive* *1,915 words of positive outlook. (It does not contain words for yes, which has been made a separate category of 20 entries.)*	0.462	0.717	0	7
Négatif : *Negative* *2,291 words of negative outlook (not including the separate category no in the sense of refusal).*	0.252	0.521	0	5
Actif : *Active* *2045 words implying an active orientation.*	0.585	0.764	0	7
Economique : *Econ* *510 words of an economic, commercial, industrial, or business orientation, including roles, collectivities, acts,abstract ideas, and symbols, including references to money. Includes names of common commodities in business.*	0.648	0.844	0	7
Légal : *Legal* *192 words relating to legal, judicial, or police matters.*	0.051	0.236	0	5
Communication : *ComForm* *895 words relating to the form, format or media of the communication transaction.*	0.158	0.403	0	4
Abstrait : *Abstract* *185 words reflecting tendency to use abstract vocabulary. There is also an ABS category (276 words) used as a marker.*	0.228	0.488	0	5
Qualité : *Quality* *344 words indicating qualities or degrees of qualities which can be detected or measured by the human senses. Virtues and vices are separate.*	0.049	0.221	0	2
Quantité : *Quantity* *314 words indicating the assessment of quantity, including the use of numbers.*	0.174	0.444	0	5

TABLE 1.14 – **Analyse de contenu : catégories lexicales par source et score et critère ESG.** Nombre moyen de mots par titre d'article.

Catégorie	**Entreprise**		**Média**		**ONG**		**Toutes sources**	
Lexicale	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.	Pos.	Nég.
				Environnement				
Positive	0,30	0,43	0,33	0,18	0,32	0,19	0,32	0,27
Negative	0,07	0,27	0,13	0,25	0,15	0,31	0,12	0,28
Active	0,35	0,51	0,48	0,31	0,47	0,42	0,43	0,41
Legal	0,01	0,07	0,02	0,03	0,01	0,05	0,02	0,05
Economic	0,42	0,55	0,45	0,34	0,40	0,50	0,42	0,46
Passive	0,04	0,03	0,06	0,06	0,05	0,09	0,05	0,06
Abstract	0,19	0,07	0,19	0,09	0,23	0,15	0,20	0,11
Qualitative	0,03	0,07	0,03	0,04	0,03	0,03	0,03	0,05
Quantitative	0,11	0,05	0,11	0,09	0,13	0,08	0,12	0,07
Communication	0,12	0,14	0,13	0,08	0,13	0,10	0,12	0,11
				Social				
Positive	0,51	0,24	0,44	0,17	0,40	0,18	0,45	0,20
Negative	0,10	0,25	0,13	0,23	0,15	0,32	0,13	0,27
Active	0,45	0,35	0,43	0,32	0,40	0,36	0,43	0,34
Legal	0,01	0,02	0,02	0,04	0,02	0,05	0,02	0,04
Economic	0,56	0,59	0,51	0,36	0,60	0,49	0,56	0,48
Passive	0,06	0,03	0,06	0,08	0,07	0,09	0,06	0,07
Abstract	0,22	0,08	0,18	0,08	0,20	0,10	0,20	0,09
Qualitative	0,02	0,01	0,02	0,02	0,02	0,03	0,02	0,02
Quantitative	0,17	0,09	0,12	0,10	0,13	0,07	0,14	0,09
Communication	0,13	0,13	0,11	0,09	0,15	0,10	0,13	0,11
				Gouvernance				
Positive	0,50	0,25	0,42	0,20	0,40	0,24	0,44	0,23
Negative	0,09	0,26	0,12	0,26	0,14	0,25	0,12	0,26
Active	0,47	0,36	0,46	0,34	0,45	0,37	0,46	0,36
Legal	0,02	0,21	0,02	0,09	0,02	0,06	0,02	0,12
Economic	0,59	0,54	0,58	0,38	0,59	0,45	0,59	0,46
Passive	0,08	0,12	0,08	0,08	0,07	0,07	0,07	0,09
Abstract	0,18	0,10	0,21	0,09	0,18	0,08	0,19	0,09
Qualitative	0,02	0,03	0,03	0,03	0,02	0,03	0,02	0,03
Quantitative	0,10	0,10	0,13	0,11	0,09	0,06	0,10	0,09
Communication	0,17	0,20	0,14	0,13	0,18	0,10	0,16	0,14
				Tous critères ESG				
Positive	0,46	0,27	0,40	0,18	0,40	0,21	0,42	0,22
Negative	0,10	0,26	0,13	0,25	0,15	0,28	0,13	0,26
Active	0,44	0,41	0,44	0,34	0,44	0,38	0,44	0,38
Legal	0,02	0,12	0,02	0,07	0,02	0,06	0,02	0,08
Economic	0,53	0,55	0,51	0,37	0,56	0,49	0,53	0,47
Passive	0,06	0,07	0,07	0,08	0,06	0,09	0,06	0,08
Abstract	0,19	0,09	0,20	0,09	0,22	0,10	0,20	0,09
Qualitative	0,02	0,02	0,03	0,03	0,02	0,03	0,02	0,03
Quantitative	0,14	0,08	0,13	0,10	0,12	0,06	0,13	0,08
Communication	0,14	0,16	0,13	0,11	0,15	0,10	0,14	0,12

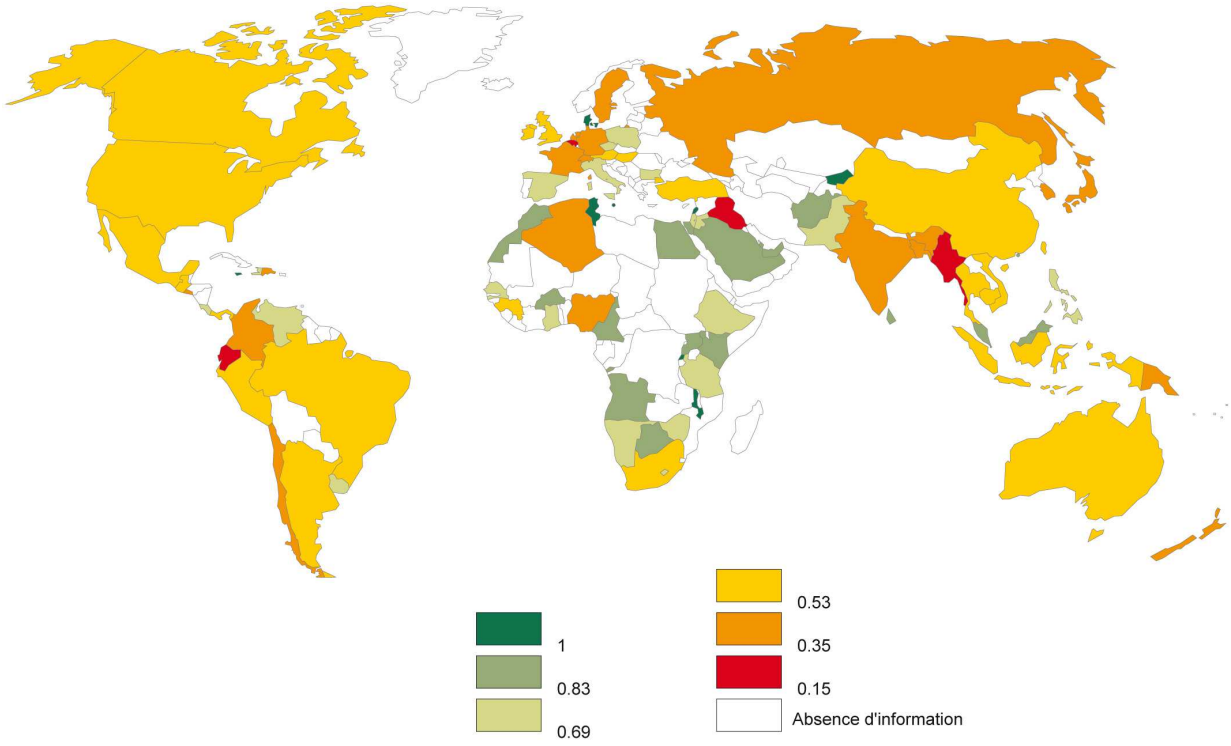

FIGURE 1.15 – **Réputation sociale** (part des informations positives sur le total des informations) des pays, toutes sources confondues, entre 2002 et 2010. Les états ayant moins de 10 informations sociales recensées ne sont pas considérés

TABLE 1.15 – **Sources types des caractéristiques lexicales des titres des articles.**

Régressions probit : les catégories lexicales du contenu des titres des articles en fonction des types de source et score

Article	Positif	Negatif	Actif	Passif	Econ.	Légal	Comm.	Abstrait	Qual.	Quant.
P Interne	.332 (.019)***	-.356 (.024)***	.135 (.019)***	-.042 (.028)	.071 (.019)***	-.293 (.039)***	.177 (.023)***	.124 (.021)***	-.103 (.036)***	.025 (.023)
N Interne	-.050 (.060)	.520 (.059)***	.180 (.058)***	-.003 (.082)	.136 (.058)**	.427 (.079)***	.122 (.069)*	-.272 (.071)***	-.052 (.105)	-.083 (.072)
P Médias	.162 (.012)***	-.211 (.014)***	.125 (.012)***	-.052 (.017)***	-.014 (.012)	-.226 (.022)***	.045 (.015)***	.020 (.013)	-.006 (.021)	.008 (.014)
N Médias	-.359 (.014)***	.507 (.015)***	.052 (.014)***	.138 (.019)***	-.038 (.013)***	.355 (.022)***	.086 (.017)***	-.380 (.016)***	.111 (.023)***	-.031 (.016)*
P ONG	.221 (.030)***	-.123 (.035)***	.241 (.029)***	.079 (.040)*	.171 (.029)***	-.185 (.058)***	.293 (.034)***	.108 (.032)***	-.079 (.054)	.034 (.035)
N ONG	-.236 (.026)***	.503 (.026)***	.035 (.025)	.051 (.034)	.096 (.024)***	.255 (.038)***	.073 (.030)**	-.183 (.029)***	.104 (.041)**	-.246 (.033)***
Const.	-.388 (.011)***	-.848 (.012)***	-.216 (.011)***	-1.364 (.015)***	-.059 (.011)***	-1.697 (.018)***	-1.120 (.013)***	-.777 (.012)***	-1.713 (.019)***	-1.021 (.013)***
#	99774	99774	99774	99774	99774	99774	99774	99774	99774	99774
Log like.	-63776.33	-48477.97	-68575.73	-29523.56	-68976.3	-17698.88	-41334.75	-49500.39	-18339.75	-42446.14

Les écarts-types sont donnés entre parenthèses. Une, deux, ou trois astérisques indiquent une significativité supérieure à 10-, 5-, et 1-poucents, respectivement.

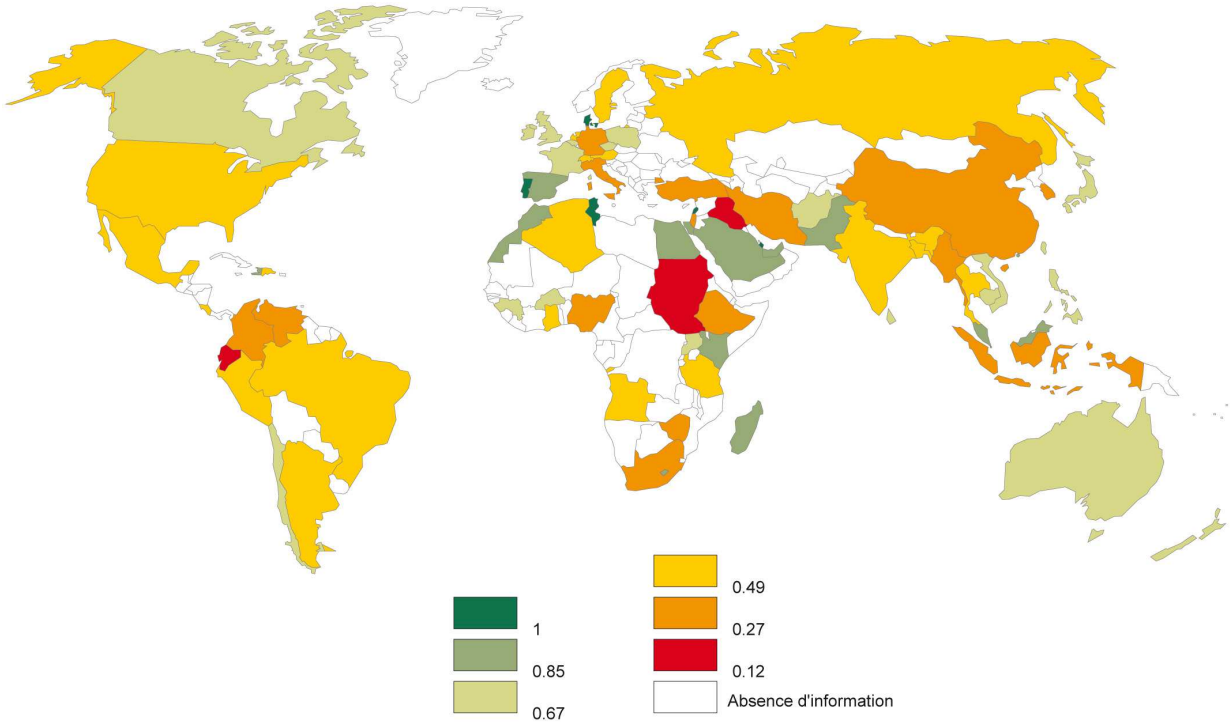

FIGURE 1.16 –
Réputation relative à la gouvernance d'entreprise (part des informations positives sur le total des informations) des pays, toutes sources confondues, entre 2002 et 2010. Les états ayant moins de 10 informations de gouvernance d'entreprise recensées ne sont pas considérés

TABLE 1.16 – **Caractéristiques lexicales des titres par source : régressions probit.**

Types de sources et score en fonction des catégories lexicales du contenu des titres des articles.

Catégorie	P Int	N Int	P Med	N Med	P NGO.	N NGO
Positif	.146	-.018	.171	-.319	.050	-.136
	(.009)***	(.025)	(.006)***	(.008)***	(.012)***	(.013)***
Négatif	-.253	.166	-.372	.442	-.078	.270
	(.017)***	(.025)***	(.009)***	(.009)***	(.021)***	(.014)***
Actif	.007	.024	.066	-.048	.020	-.051
	(.009)	(.021)	(.006)***	(.007)***	(.012)*	(.011)***
Passif	-.052	-.095	-.067	.117	.035	-.056
	(.022)**	(.053)*	(.014)***	(.015)***	(.029)	(.026)**
Économique	.043	.047	-.009	-.039	.062	.046
	(.007)***	(.018)***	(.005)*	(.006)***	(.010)***	(.009)***
Légal	-.320	.273	-.489	.579	-.221	.181
	(.036)***	(.050)***	(.020)***	(.020)***	(.048)***	(.030)***
Communication	.056	-.002	-.056	.039	.159	-.005
	(.015)***	(.040)	(.010)***	(.012)***	(.020)***	(.020)
Abstrait	.076	-.094	.089	-.252	.076	-.031
	(.012)***	(.039)**	(.008)***	(.011)***	(.017)***	(.018)*
Qualitatif	-.150	-.039	-.063	.167	-.098	.056
	(.032)***	(.080)	(.019)***	(.021)***	(.045)**	(.035)
Quantitatif	.024	-.048	.022	-.010	.012	-.169
	(.014)*	(.038)	(.009)**	(.011)	(.019)	(.022)***
Const.	-1.614	-2.659	.032	-.719	-2.140	-1.859
	(.010)***	(.026)***	(.007)***	(.007)***	(.015)***	(.013)***
#	99774	99774	99774	99774	99774	99774
Log like.	-22689.94	-3042.26	-66837.95	-49072.55	-10084.98	-13841.5

Les écarts-types sont donnés entre parenthèses. Une, deux, ou trois astérisques indiquent une significativité supérieure à 10-, 5-, et 1-poucents, respectivement.

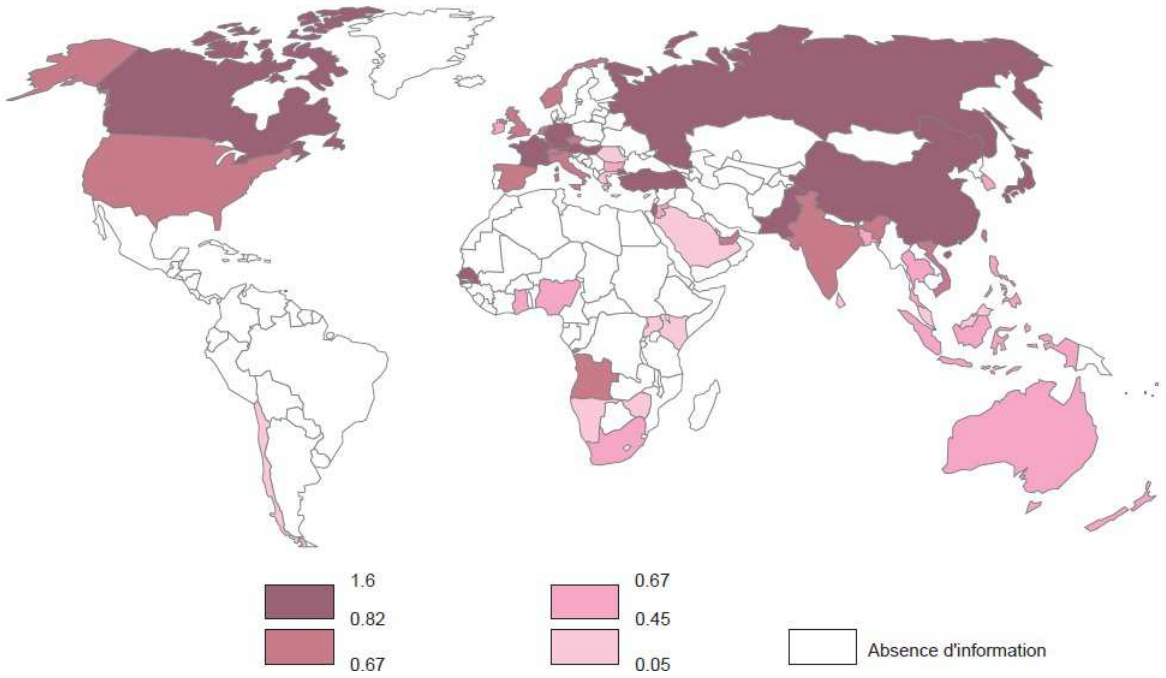

FIGURE 1.17 – **Lexique économique des médias par pays.** : nombre moyen de mots appartenant au champ lexical de l'économie par publication médiatique. Les pays ayant moins de 10 publications médiatiques recensées sont exclus.

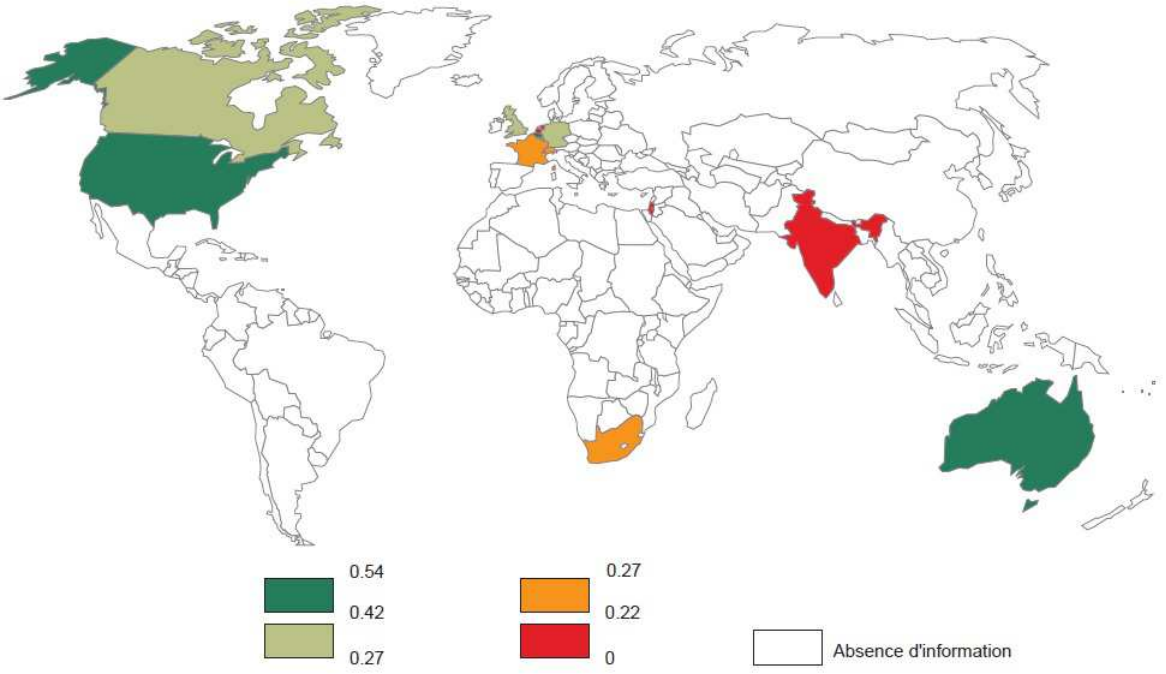

FIGURE 1.18 – **Lexique positif des ONG par pays.** : nombre moyen de mots ayant un lexique positif par publication d'ONG. Les pays ayant moins de 10 publications d'ONG recensées sont exclus.

Chapter 2

The Weighting of CSR Dimensions: Does One Size Fit All?

"*If you lie with your head in the oven and your feet in the fridge, on average you'll be comfortably warm.*"

"L'essentiel est sans cesse menacé par l'insignifiant"[1] René Char

1. "The key is constantly threatened by the insignificant"

Abstract

The concept of Corporate Social Responsibility (CSR) is fundamentally multidimensional. Yet, this multidimensionality is often overlooked, especially when it comes to measure Corporate Social Performance (CSP). Most of the studies use equally-weighted composite scores, provided by extra-financial rating agencies (mainly KLD) which just sum the scores of different facets of CSR to provide an overall assessment. What is the relevance of such a composite ESG score? Does it make sense to give the same weight to all criteria? Does the weighting scheme should be the same when it comes to assessing banks and oil companies? In this paper, we propose an original weighting scheme of CSR strengths and concerns, at a sectorial level, that is proportional to media and NGOs scrutiny, and based on a comprehensive database of environmental, social and corporate governance news. Overall, we provide evidence that environmental and corporate governance concerns have been under-weighted in the previous assessments of corporate social performance in favor of controversial issues. Moreover, we show that the sectors that are exposed to the closest scrutiny are usually criticized on a single dimension: banks for bad corporate governance, while basic resources firms for environmental damages. Hence, a composite score based on equally weighted sums will misrepresent the differences of CSR between sectors.

Thanks to Olena Havrylchyk, Pierre-Charles Pradier, James Mattingly, two anonymous referees, as well as participants at the SIRP-Mistra Workshop in Paris (April, 2012) and INFER Conference (May, 2013) for helpful comments.

2.1 Introduction

Assessing the level of Corporate Social Performance (CSP) for a given firm is notoriously difficult (Carroll, 1991). A first problem is related to the very qualitative nature of Corporate Social Responsibility (CSR): Environmental, Social or Corporate Governance issues (the so-called ESG factors) offer little opportunity for a quantitative evaluation. Still, there is a growing and promising academic literature on social and environmental accounting (see Mathews, 1997; Gray, 2002; Unerman, 2007). A second obstacle arises when it comes to aggregating several criteria, as the concept of corporate responsibility is fundamentally multidimensional (Carroll, 1979). Hence, any attempt to provide an overall score of CSR is a real challenge. The problem posed by the multidimensionality is often overlooked. Most of the extra-financial rating agencies aggregate the scores of different facets of CSR to provide a general assessment, regardless of the problems this can potentially cause. What is the relevance of such a composite ESG score? How can it be improved?

Aggregation between several criteria makes sense i) if we consider that a good score may compensate a bad score - the fungibility hypothesis - and ii) if we are able to assign some weights to each criterion - the commensurability hypothesis. Several papers (Mattingly and Berman, 2006; Strike et al., 2006; Delmas and Doctori-Blass, 2010; Kotchen and Moon, 2011; Oikonomou et al., 2012) have recently challenged the fungibility hypothesis by documenting that a same company might be environmentally-friendly and, at the same time, behave irresponsibly. In this paper, we focus on the latter aspect, the commensurability hypothesis. Most of the previous papers assume equally-weighted composite scores which is equivalent to assume that all corporate responsibility criteria are equally important for all firms. We claim that this is a very unsuitable assumption. Is it reasonable to give the same weight to environmental and to corporate governance issues? Furthermore, should these weights be the same for the banking sector and the oil & gas sector?

The problem of aggregation between ESG criteria has attracted little attention from scholars. Recently, Chen and Delmas (2011) have used the methodology of Data Envelopment Analysis (DEA) to provide a composite score of ESG efficiency. The main interest of this non-parametric approach is that it does not require prior knowledge of the weights which are endogenously de-

termined based on optimization calculus. Such methods derived from multiple-criteria decision analysis are theoretically well-founded and empirically powerful. The problem is that they may be difficult to grasp for non-specialists, all the more since several methods co-exist, inevitably based on disputed assumptions[2].

A more intuitive approach is to use a weighting scheme. Some papers have already proposed some weighting schemes (Waddock and Graves, 1997; Ruf et al., 1998) based on questionnaire survey sent to experts on CSR. However, there are two major shortcomings with these approaches. First, corporate responsibility concerns have evolved a lot since the mid-1990s and the previous weights are somewhat out-of-date; in particular, they do not take into account corporate governance issues which are now considered as one of the pillars of CSR. Second, most previous weighting schemes assume that the weights are the same across sectors, which is a very strong hypothesis.

In this paper, we propose an original weighting scheme based on media and NGOs scrutiny. For that purpose, we analyse thousands of ESG news published by the media or NGOs concerning 100 listed firms over the period 2002-2010. These ESG news can be good or bad. This rich database has been provided by Covalence, an information provider that systematically collects ESG information displayed on Internet concerning the world's largest companies. We use this abundant information to provide a set of weights between E, S and G criteria which reflect the concerns of the society on CSR and which are different for each sector.

We show that previous composite scores, particularly KLD -widely used in the literature- under-weighted environmental concerns and over-weighted controversial issues (such as South Africa, military or Human rights in a broad sense) which involve a minority of firms. Moreover, we provide evidence that the firms the most exposed to criticism on CSR are especially exposed on a single dimension. Banks are mainly criticized for their bad corporate governance, while they have good environmental reputation. Conversely, firms in the basic resources and oil & gas sectors are mostly exposed to criticism on environmental damages. Lastly, large retailers (in-

2. In particular, because DEA is an extreme point technique, results are sensitive to outliers.

cluded in the sector Consumer goods and services) have a poor social record. Hence, composite equally-weighted scores misrepresent the differences between sectors.

The reminder of the paper is organized as follows. Section 2 exposes the theoretical framework and explains the assumptions behind composite CSR scores. The methodology of the new weighting scheme and the data are described in Section 3. Empirical results are provided in Section 4. Section 5 concludes.

2.2 The "apples and oranges" problem

Economists have long faced the challenges posed by composite indicators and the so-called "weighting and aggregation problem", so that the OECD has recently published a user-guide on constructing composite indicators (OECD, 2008). Aggregation of multiple criteria has also given rise to a very large literature, known as the Multiple Criteria Decision Analysis (MCDA); see Wallenius et al. (2008) for a survey.

The main question addressed in the present paper is about the aggregation of the CSR criteria. The problem is the following: assuming that the objectives are clearly defined, consensual, and measurable, can we consider that a bad score on one dimension might be compensated by a good score on another? While it raises serious concerns, this question has not been extensively examined so far. Actually, the problem is twofold. First, can a good action offset a bad one? In other words, can we consider that bad and good scores are fungible? Second, can environmental, social and governance practices (whether good or bad) be combined? If so, how to ensure that the indicators are commensurable?

Fungibility. For scholars who have considered the hypothesis of fungibility, it should be rejected. Unlike what is usually done in the academic literature, for Mattingly and Berman (2006, p. 20), "positive and negative social action are both empirically and conceptually distinct constructs and should not be combined". Another fundamental reason not to combine, at least without caution, positive and negative CSR indicators rely on strategic interactions. In practice, Delmas and Doctori-Blass (2010) have shown that "firms [in the chemical sector] that have

the most advanced reporting and environmental management practices tend also to have higher levels of toxic releases and lower environmental compliance". Kotchen and Moon (2011) come to the same conclusion for a large panel of firms: "when companies do more harm, they also do more good" while Oikonomou et al. (2012) confirm that "firms typically present a mixed picture of corporate social performance (CSP), with positive and negative indicators exhibited by the same firm." Beyond the fact that it is not theoretically grounded, the fungibility hypothesis may bias the measure of CSP as predicted by Strike et al. (2006): "when CSR and CSiR [Corporate Social Irresponsibility] are aggregated to predict financial performance, as has been the case in most studies [...], strengths can offset weaknesses, reducing variation in the dependent variable."

Commensurability. In order to combine environmental, social and governance practices, in the absence of a common standard, we need a kind of exchange rate in order to have commensurable quantities. Obviously, it is impossible to directly convert the volume of toxic releases, with the quality of the working conditions for women or the firm policy in terms of corruption. It's why extra-financial rating agencies usually provide indicators in the form of ratings which cover a large set of CSR criteria. Then, it is very tempting to sum the ratings to obtain a global assessment of the CSP. However, it is very unlikely that all criteria have equal importance. Yet, this fundamental problem is usually overlooked. For instance, KLD (now MSCI ESG Research) used no less than thirteen (positive or negative) criteria [3]. They cover a wide spectrum: corporate governance, community, diversity, employees, environment, human rights, and products, plus exclusionary screens (alcohol, firearms, gambling, military, nuclear and tobacco). A score is given to every criterion from an aggregation of several sub-indicators, and the scores are then added up to calculate the final score. In other words, every criterion is weighted in the same way. Equally-weighted sum is the simplest multi-criteria decision making method when facing several criteria. But, of course, this is applicable only if all the data are expressed in a same unit (i.e. commensurable). Otherwise, it is equivalent to "adding apples and oranges". Rowley and Berman (2000) are critical vis-à-vis studies that use a single-dimensional measure of CSR. Chen and Delmas (2011) also point out that "because the full spectrum of [CSR] is broad, generating

3. The KLD database is the most commonly used, but most of the other extra-financial information providers (SAM, Vigéo, etc.) apply, more or less, the same methodology. In contrast Jantzi (now, Sustainalytics) considers specific weights for each sector.

a proxy that can reflect its full scope is challenging".

One can also raise the question of the choices' transitivity. More generally, the problem is an illustration of the well-known Condorcet Paradox. The following (caricatural) example will illustrate how difficult it is to assess CSR and to establish a general ranking. Let us consider three hypothetical firms. i) Bigbank is a famous Wall Street investment bank. The bank is ranked first in environment (its direct activity is non-polluting), second in social issues, but third in governance (despite of the crisis, very large bonuses have been distributed). ii) Superoil is an oil company which operates offshore platforms. The firm is ranked third in environment, but first in social issues (employees receive a participation on profits, the CEO is very involved in the sponsorship of contemporary art), second in governance (the board of directors is composed of one third of women). iii) Giantstore is a large retailer active in many countries. The firms is ranked second in environment, third in social (wages are very low, working hours are fragmented, etc.) and first in governance. Each firm is ranked first once, second once, and third once. Therefore, there is a complete indeterminacy. In this example, the co-existence of several criteria leads to a deadlock of the selection process. One solution is to impose a lexicographic order, that is to prioritize the criteria. Weights previously computed on a subset of fungible and commensurable criteria can help to identify such priorities.

Many studies use composite measures of CSR regardless of the aggregation problem. By extrapolating the survey of Chen and Delmas (2011), it seems that about 75% of the academic studies that using composite scores simply use equally-weighted scheme [4]. By doing so, they assume that all criteria have similar importance.

Some studies have proposed methods to circumvent the "apples and oranges" issue. From the early 1980s, Aupperle et al. (1983) and then Aupperle (1990) have relied on weights firms assign themselves to their economic, legal, ethical, and discretionary responsibilities. Later, Clarkson (1995) have developed a stepwise approach for determining a Stakeholder Satisfaction Index.

4. The authors list 43 studies using KLD data and published in the best academic journals (Academy of Management Journal, Business & Society, Journal of Business Ethics, Strategic Management Journal): 26 use equally-weighted composite scores, 9 weighted composite scores and 8 use only single-dimension scores.

Steg et al. (2003) have set up a similar approach. Pierick et al. (2004) compare these methods and provide a comprehensive operationalisation of CSR. But we still need a convenient way to assess the different weights. In table 2.1, we present alternative weighting schemes proposed in the literature. It includes (i) KLD equal weights (three versions: 1991, 2011 and MSCI ESG Research 2013), (ii) weights derived from expert opinions (Waddock and Graves 1997), (iii) weights derived from survey of public affairs officers, executives of non-profit organizations, and managerial accountants (Ruf et al. 1998), and (iv) weights generated by Sustainalytics (former Jantzi Research) which depend on the sectors; these data are not public and Bansal et al. (2008) provide only the minimum and the maximum weights for each category [5].

Let's first examine the three weighting schemes based on KLD ratings. The weights are computed implicitly from the number of categories (equally-weighted schemes), and are identical for all sectors. Since the 1990s, these categories have undergone some changes (Sharfman, 1996; Hart and Sharfman, 2012); moreover, the status of some category is open to interpretation. Hence, we report three equally-weighted schemes based on different sets of assumptions. In column #1 KLD (1990s), we take into account the fourteen initial KLD categories and we treat them equally. In column #2 KLD (2000s), South Africa has been removed and, more important, we do not consider each controversial issue as a fully fledged category but we group them into a unique and global category. This choice reflects the fact that, from 2002, "KLD listed companies for only one type of involvement in any business issue". In other words, while qualitative issue areas may take value 0, 1, 2, 3 ... 7 (the maximum number of sub-categories [6]), controversial issues may only take the value 0 or 1. In column #3 MSCI (2013), according to the last presentation of MSCI ESG Research, we group the categories "Diversity" and "Employee relations" (now renamed "Labor Rights & Supply Chain Management") and the categories "Human Rights" and "Community". Obviously, the definition of the scope for each category has a decisive influence on the weighting schemes and, consequently, the global assessment of the CSP. Within 20 years, concerns in terms of CSR have evolved and KLD categories have changed accordingly. Thus, the (implicit) weights attributed to the environment and corporate governance issues have increase

5. Every CSR rating agency has its own set of categories, so we have to recombine them (see the first chapter's appendix for the correspondence of the criteria).

6. The maximum score (7) was obtained, for instance, in 2006, by Xerox Corporation for the category strength-diversity.

significantly.

Table 2.1: **Previous weighting schemes**

			KLD (1990s)	KLD (2000s)	MSCI (2013)	WG (1997)	RMP (1998)	Sustainalytics (2008)
E		Environment	7.14%	12.5%	20%	14.2%	14.1%	11.11%-32%
		Nuclear power[a)]	7.14%	2.1%		8.9%	7.4%	
S		Community	7.14%	12.5%				11.11%-30.77%
		Human rights	7.14%	12.5%	20%	14.8%	12.5%	0%-26.67%
		South Africa[a)]	7.14%			7.6%	4.6%	
		Diversity	7.14%	12.5%	20%	13.6%	15.2%	16.67%-33.33%
		Employee relations	7.14%	12.5%		16.8%	18.3%	
		Products / consumers	7.14%	12.5%	20%	15.4%	22.9%	0%-22.22%
G		Corporate governance	7.14%	12.5%	20%			8.33%-22.22%
Controversial	issues	Alcohol	7.14%	2.1%				
		Gambling	7.14%	2.1%				
		Firearms	7.14%	2.1%				
		Tobacco	7.14%	2.1%				
		Military contracts	7.14%	2.1%		8.6%	5.0%	

Notes: KLD (1991): Fourteen categories equal-weights ("Human Rights" was designated as "Non-U.S. Operations" and "Corporate governance" as "Other"). KLD (2011): Seven qualitative categories + Controversial issues equal-weights. MSCI ESG Research (2013): Five categories equal-weights; "Human Rights" and "Community" have been grouped; "Diversity" and "Employee relations" have been grouped and named "Labor Rights & Supply Chain Management". WG (1997): Waddock and Graves (1997). RMP (1998): Ruf et al. (1998). Sustainalytics (2008): Bansal et al. (2008). a) Usually classified amongst the controversial business issues.

Waddock and Graves (1997) and Ruf et al. (1998) generated weights for the different KLD dimensions based on survey questionnaires sent to experts on CSR. The two studies provide similar results: Employee relations and product/liability issues were found to be the most important categories (about 20% each), followed by community relations, women/minority and the environment (between 10% and 15% each). It should be noted that, already in the 1990s, experts (WG 1997; RMP 1998) give a greater weight to environment than what is inferred from KLD. However, these previous weighting schemes ignored corporate governance issues. One question with this approach is, of course, who should weight the various scores: CEOs, a sample of stakeholders (which ones?) or academics (but what is their legitimacy?)? The answer depends on whether we want to gather data on business expectations, or to capture society's expectations. Nevertheless, it is clear that the opinions - and so the answers - are likely to vary significantly from one group to another.

Recently, Chen and Delmas (2011), propose to use the Data Envelopment Analysis (DEA) to provide an overall measure of ESG efficiency. Their approach is very appealing since it does not require any assumption regarding the fungibility of the criteria and any explicit weights. These weights are generated automatically through an optimization procedure that maximizes the firms ESG efficiency relative to the other firms in the sample.

As we have already mentioned, the weighting and aggregation problem is not unique to CSR composite indexes. An illustrative example is provided by the literature on human development indexes. Contrary to the CSR literature, the inconsistency of the equally-weighted assumption has been recognized since a long time ago in this setting (see, for instance, Desai, 1991; Sagar and Najam, 1998). Several empirical papers have dealt with this issue and the two approaches coexist: some are in favor of weighting schemes obtained from opinion survey based on interviews with international experts in development economics (Chowdhury and Squire, 2006); others simulated weighting schemes from non-parametric optimization approaches (Despotis, 2005; Cherchye et al., 2008; Blancard and Hoarau, 2011).

Irrespective of the method, one crucial empirical question in the CSR setting is whether we should consider the same weights for different industries. Previous academic papers implicitly consider that "one size fits all". Obviously, this is a very restrictive hypothesis: it is very likely that environmental issues are more important for the oil & gas sector than for the banking sector. Note also that the optimization approach is not adapted to deal with this issue.

2.3 Empirical methodology

We propose a new approach to generated weights for the different dimensions of CSR based on the number of articles published by the media or NGOs. Our aim is to assign weights that can be different across sectors (and, eventually, that can change over time). We consider that the weight for each criterion should be proportional to public scrutiny. Precisely, a weight is defined as a number of articles on a specific dimension of CSR, divided by the total number of news on CSR. This ratio is computed at the sectorial level. By using news published by the

media and NGOs, we hypothesize that they reflect the degree of social concerns.

2.3.1 A comprehensive database on ESG news

Covalence EthicalQuote

We use an original database provided by Covalence SA. Created in 2001 in Geneva (Switzerland), Covalence has developed, in partnership with Datadoxa, a systematic collection of positive and negative ESG information concerning the world largest companies. The news are collected on the web and their range is very broad. Table 1.10 in the previous appendix provides some examples of ESG news collected by Covalence. Positive news (Good news) include, for instance, announcement of a social sponsoring program, the launch of new eco-innovative product, a green award, etc. Negative news (Bad news) relate to toxic release disclosure, rumors of downsizing, the divulgation of bad labor practices in subcontractor factories, etc. According to Covalence, each day 20 analysts perform a total of 80 hours of reading, screening 2,000 news items (in English, Spanish, German and French). As of 2010, their database includes more than 190,000 information items from more than 10,000 sources, covering more than 500 companies.

The sample

Covalence provides us with a sample of 191,881 ESG news items from January 2002 to December 2010 concerning 580 multinational listed companies; all of them belong to the Dow Jones Sector Titans Indexes. We consider only the 100 companies with the highest number of CSR announcements, which represent an initial sample of 128,281 news items . We choose to keep only news items with an unambiguous source, which leaves 109,012 news items. As a given announcement can be classified by Covalence into different ESG criteria, we merge some news items to keep 80,792 non-redundant announcements. We drop also quasi-similar articles on a same event. This leaves 75,571 CSR announcements, positive or negative, from January 2002 to December 2010 concerning 100 multinational publicly listed companies. Covalence collects ESG news from a large number of different sources. In this paper, we consider only ESG news that come from media (press and specialized press), and NGOs, and ignores the news released by the

firms themselves[7]. This leaves 70,250 CSR announcements, positive or negative, from January 2002 to December 2010 concerning 100 multinational publicly listed companies.

Covalence classifies news into 45 criteria depending on the topic. We group them into three broad categories: environment (E), social (S) and corporate governance (G). It should be noted that some news involve several issues. To facilitate the comparison with the weighting schemes previously proposed in the literature, we also classify our news according to the KLD approach: employee relations, diversity (women/minority), environment, community, product, corporate governance, and Human rights[8]. Finally, firms are grouped into six industries: Banks (11 firms), Basic Resources - including Oil & Gas - (14), Chemicals - including Health Care - (16), Consumer goods and services - including Personal & Household Goods, Food & Beverages, and Retail - (18), Industrial Goods - including Automobiles & Parts - (15) and Technology (26).

2.3.2 Stylized facts on ESG news

Before examining the weighing scheme derived from our sample of ESG news, we present a broad set of stylized facts on CSR announcements. In table 2.2, we provide the total numbers of ESG news by sectors. Good news and bad news are considered separately. We also distinguish announcements which relate to environmental, social and corporate governance issues. Finally, we set apart news released by the media (Panel A) and NGOs (Panel B).

Independently of the repartition between the different facets of CSR, the total number of ESG news is a good proxy of the intensity of CSR scrutiny. Thus, ESG issues play the greatest role for Consumer goods and service (23% of the total number of ESG news) and Technology (22%), following by Basic resources (17%), Industrial goods (17%), Chemicals (14%) and Banks (8%). The picture is somewhat different if we consider only concerns, i.e. bad news. In this case, the sector under the closer scrutiny is Basic resources (26% of the total number of bad ESG news), followed by Consumer goods and service (21%), Chemicals (18%), Technology (15%), In-

7. Firm's press releases are part of the corporate strategy disclosure which is not the aim of this paper. On that topic, see for instance, Maignan and Ralston (2002) and Cormier, Gordon and Magnan (2004).

8. Some announcements may involve several criteria so the total number of announcements (column ESG) is lower than the sum of announcements on E, S and G.

Table 2.2: **Number of ESG news breakdown by sectors**

This table reports the total number of good news (P) and bad news (N) on Environmental, Social and Corporate Governance issues, breakdown by sectors. ESG news released by the media, NGOs or firms are considered separately and presented on Panel A, B and C respectively. Data: Covalence. Sample period: 2002-2010. Author's computation.

	Environment		**Social**		**Governance**		**ESG**	
	P	N	P	N	P	N	P	N
Panel A: Media								
Banks	884	158	1783	899	1100	1201	3191	2010
Basic Resources	1698	2289	1993	1915	1928	2594	4642	5398
Chemicals	853	607	774	695	771	508	1947	1360
Consumer goods and services	3734	830	4541	2719	3788	1815	9940	4358
Health Care	264	53	2333	1454	1366	1117	3431	2143
Industrial goods	4755	525	1913	1584	2479	893	7722	2625
Technology	5758	639	4049	2036	4485	2086	11920	4250
All sectors	17946	5101	17386	11302	15917	10214	42793	22144
Panel B: NGOs								
Banks	70	93	115	83	64	140	202	251
Basic Resources	103	492	107	353	127	568	272	1010
Chemicals	43	167	51	206	33	166	105	376
Consumer goods and services	192	166	274	505	189	372	528	805
Health Care	22	24	184	220	91	256	254	387
Industrial goods	89	55	88	83	59	101	200	200
Technology	180	87	180	131	120	167	412	317
All sectors	699	1084	999	1581	683	1770	1973	3346
Panel C: Firms								
Banks	100	10	321	32	153	27	478	56
Basic Resources	305	33	367	33	301	40	795	87
Chemicals	126	8	120	12	143	18	293	30
Consumer goods and services	273	21	405	53	336	27	803	92
Health Care	51	1	522	19	275	12	732	28
Industrial goods	341	19	182	26	239	22	642	60
Technology	498	15	473	31	425	35	1147	66
All sectors	1694	107	2390	206	1872	181	4890	419

dustrial goods (12%) and Banks (8%).

Before considering a breakdown by sector, let us examine the overall repartition of news across E, S and G concerns. Figure 2.1 provides information on the proportion of E, S and G news released either by the firms themselves, the media or the NGOs for all sectors. Good news and bad news are set apart. The proportions are computed as follow: $N^{i,\ Good}_{.,\ k}/N^{\cdot,\ Good}_{.,\ k}$ for Panel A and $N^{i,\ Bad}_{.,\ k}/N^{\cdot,\ Bad}_{.,\ k}$ where i = E, S or G and k = firms, media, NGOs or all sources. Overall, our sample of news is well-balanced in terms of ESG criteria. The distribution of good news among E, S and G concerns is approximately uniform (about one third for each category), whatever the source. However, if we consider bad news, poor social and corporate governance practices are the issues the most frequently addressed; negative environmental news count only for less than one quarter of the total number of ESG news. It is likely that this is because firms are not equally exposed to criticisms on green issues. We examine further this intuition in the following.

(a) Good ESG news

(b) Bad ESG news

Figure 2.1: **Percentage of E, S, or G news, breakdown by sources.** This figure presents the number of E, S or G news divided by the total number of ESG news for a given source (the firms themselves, the media, the NGOs) or for all sources of information. Good news and bad news are set apart. Data: Covalence. Sample period: 2002-2010. Authors' computation.

2.3.3 Which sectors are the most scrutinized?

Independently of the repartition between the different facets of CSR, the total number of ESG news (excluded firm's press releases), $N^{\cdot,\ \cdot}_{s,\ ext}/N^{\cdot,\ \cdot}_{.,\ ext}$, is a good proxy of the intensity of CSR

scrutiny. Thus, ESG issues play the greatest role for Consumer goods and service (23% of the total number of ESG news published by external sources) and Technology (22%), and slightly smaller for Basic resources (17%), Industrial goods (17%), and Chemicals (14%). Finally, the banking sector (8%) is the least concerned by ESG issues. Of course, the picture is different if we consider only concerns, i.e. bad news ($N^{\cdot,\ Bad}_{s,\ ext}/N^{\cdot,\ Bad}_{\cdot,\ ext}$). In this case, the sector under the closer scrutiny is Basic resources (26% of the total number of bad ESG news published by external sources), followed by Consumer goods and service (21%), Chemicals (18%), Technology (15%), Industrial goods (12%) and Banks (8%).

Another way to assess whether a sector is more subject to criticism is to normalize the difference between good ESG news and bad ESG news. The aim is to compare, for each sector, the number of good ESG news and the number of bad ESG news (see figure 2.2). But because, as we have seen, the total number of news depends on the sector, we do not consider the absolute number of (good or bad) news per sector; instead, we normalize it with the number of (good or bad) news for all sectors. Hence, in figure 2.2, we represent the percentage of good news (the dotted line) and bad news (the solid line) for each sector over the whole sample. We only consider news released by media and NGOs. Formally, the proportions are computed as follows: $N^{\cdot,\ j}_{s,\ ext}/N^{\cdot,\ j}_{\cdot,\ ext}$ where j = Good or Bad. This figure allows to examine which sectors are (relatively) more criticized, independently of their size. We can distinguish three groups of firms depending on whether the number of good ESG news is lower, equal or higher than the number of bad ESG news. i) As we have seen previously, the number of ESG news on the banking sector is low, around 10% of the total number of ESG news. This proportion is about the same either for good news or bad news. At the other extreme, firms included in the sectors Consumer goods & services attract a lot of attention from media and NGOs, for better and for worse. ii) Technology firms and, albeit to a lesser extent, firms which produce industrial goods attracted almost half of the good ESG news but relatively few bad ESG news. iii) Firms within the Basic resources and Chemicals sectors are those who are the most exposed to the criticism in relative terms.

If we consider ESG news published by the firms (Panel (a)), the pattern is somewhat similar,

but the gap between the percentage of good news and bad news across sector is not as exaggerated. However, this result should be interpreted with caution, as the number of bad news released by firms themselves is very low.

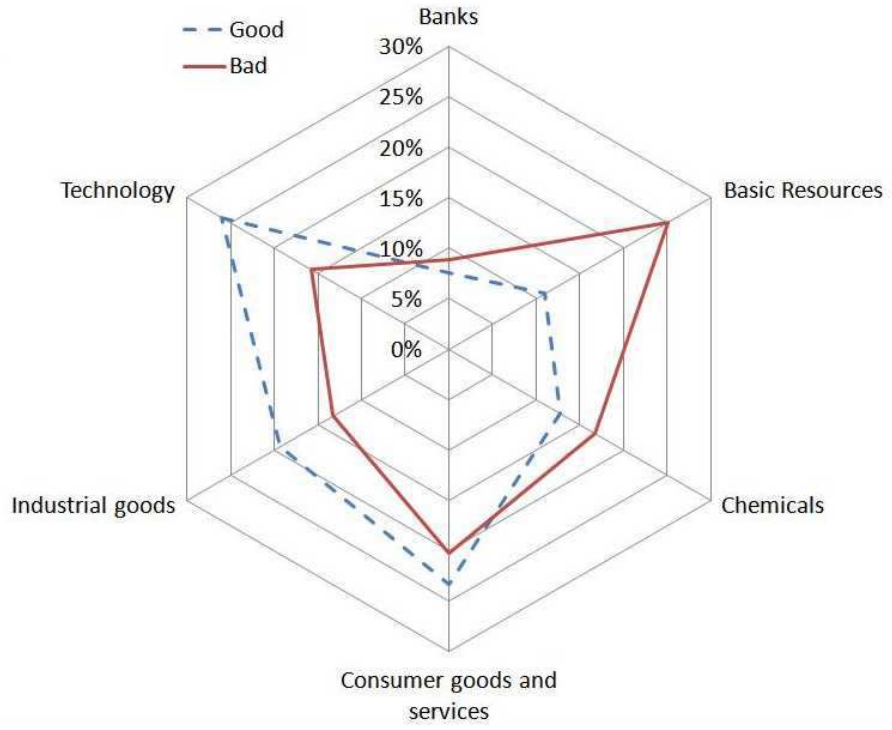

Figure 2.2: **Percentage of E, S, and G news, breakdown by sectors.** This figure presents the total number of ESG news for a sector divided by the total number of ESG news for all sectors. Only external news are considered. For readability, Chemicals include here Health Care. Data: Covalence. Sample period: 2002-2010. Authors' computation.

Figure 2.3 presents, for each sector, and for the whole period, the average number of good news (top) and the average number of bad news (bottom) by firm and by distinguishing E, S and G. The average number of ESG news by firms varies from 562 (Banks) to 918 (Consumer Goods and Services). Actually, differences across sectors are more pronounced if we consider only bad news or environmental news. While the average number of good ESG news ranges from a ratio of 1 to 1.7, bad ESG news may triple from one sector (Technology) to another (Basic resources). More formally, the dispersion (computed as the standard deviation of the the average number of ESG news by firms across sectors, divided by the average number of ESG news for the whole sample) is twice as high for good news than for bad news (0.23 against 0.41). If we restrict to

bad environmental issues, the average number of news may vary by a factor of eight depending on the sectors! This is not surprising as social or corporate governance issues is a concern for all companies, irrespective of their sector of activity, while environmental issues are more a concern for some industries (such as "Basic resources") than for others (like "Banks").

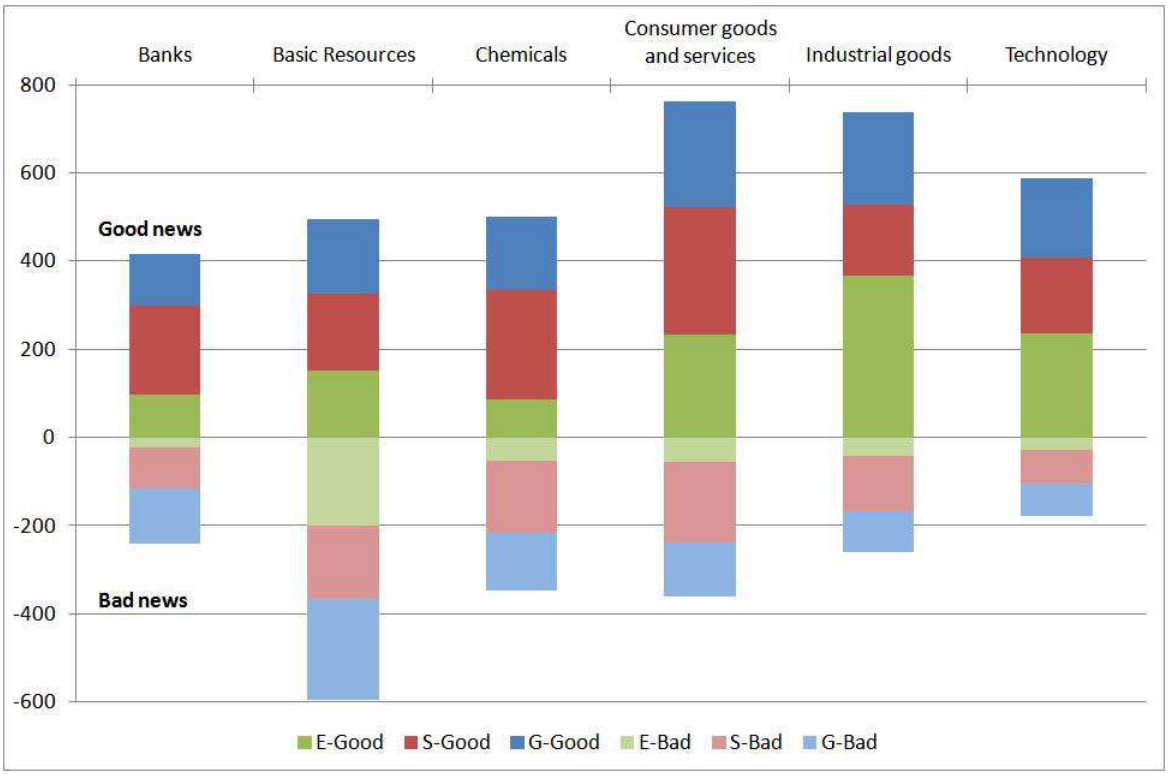

Figure 2.3: **Average number of ESG news, breakdown by sector.** This figure presents the total number of good (top) and bad (bottom) ESG news breakdown by sector, divided by the number of firms which belong to this sector. For each sector, E, S and G news are set apart and stacked. For readability, Chemicals include here Health Care. Data: Covalence. Sample period: 2002-2010. Authors' computation.

2.4 A weighting scheme based on media and NGOs scrutiny

In table 2.3, we present the weighting schemes computed, according to the same previous categories, irrespective of the sectors. We consider, alternatively, the percentage of news for each dimension published by the different sources. In panel A we consider only bad news, while in Panel B we only consider good news.

This table provides several interesting insights. The weights attributed to environmental issues are the highest: "green" news represent almost one third of the total number of good ESG

Table 2.3: **The weighting scheme, all sectors**

Categories	Media scrutiny	NGOs scrutiny	Firms Disclosure
Panel A: Concerns (bad news only)			
Environment	20%	26%	22%
Communities	13%	14%	15%
Human Rights	8%	14%	7%
Diversity	1%	1%	1%
Employees	28%	16%	29%
Products	14%	14%	13%
Corp. Governance	16%	15%	13%
Panel B: Strengths (good news only)			
Environment	36%	30%	29%
Communities	24%	23%	29%
Human Rights	3%	6%	4%
Diversity	1%	2%	2%
Employees	9%	14%	11%
Products	15%	15%	18%
Corp. Governance	11%	10%	8%

Data: Covalence. Sample period: 2002-2010. *Source*: Authors'. computation.

news. This percentage does not change significantly whether we consider news published by media, NGOs or firms. However, firms disclose relatively more positive information on communities and less on corporate governance than the media or the NGOs. If we restrict the analysis to ESG concerns, environmental issues are still important, but to a lesser extent. This is the most important concern for NGOs, but only the second most important for media and firms. For the two latter, the most important concern is related to Employees; which is also the second most important concern for NGOs. Community, Corporate governance and Products have relatively homogeneous weights, around 15%, regardless of the source. Finally, the weight associated to Human rights is typically low, except for NGOs. It is also interesting to note that the repartition of firms' negative disclosures is close to media sources.

Overall, our weighting scheme is consistent with Waddock and Graves (1997) and Ruf et al. (1998) who based their weights on experts' responses to the survey questionnaires. The main differences are for the Environment which has been previously underestimated, and Human rights which have been over-estimated. Actually, it is not surprising that the concerns focus on topics that are directly related to business activities. Although the issue of Human rights is a

major concern for society, firms are not directly involved. This is not the case for environmental damages or social conflicts.

In table 2.4, we go back to the decomposition between E, S and G criteria, which is standard now. Because firms tempt to develop a positive social image by highlighting their commitment to CSR (see Maignan and Ralston, 2002; Schlegelmilch and Pollach, 2005; Oikonomou et al., 2012), we restrict our sample to bad ESG news published by external sources. Thus, the weights are defined as $N_{s,k}^{i,Bad}/N_{s,k}^{\cdot,Bad}$ where i = Environment, Social and Corporate Governance, and k = media (Panel A) or NGOs (Panel B).

Table 2.4: **The weighting scheme, breakdown by sectors (concerns only)**

Categories	E	S	G
Panel A: Media scrutiny			
Banks	7%	40%	53%
Basic Resources	34%	28%	38%
Chemicals	34%	38%	28%
Consumer Goods and Services	15%	51%	34%
Health Care	2%	55%	43%
Industrial Goods	17%	53%	30%
Technology	13%	43%	44%
All sectors	19%	42%	38%
Panel B: NGOs scrutiny			
Banks	29%	26%	44%
Basic Resources	35%	25%	40%
Chemicals	31%	38%	31%
Consumer Goods and Services	16%	48%	36%
Health Care	5%	44%	51%
Industrial Goods	23%	35%	42%
Technology	23%	34%	43%
All sectors	24%	36%	40%

Data: Covalence. Sample period: 2002-2010.
Source: Authors' computation.

As we have seen in Table 2.1, most previous studies do not weight differently the ESG criteria across the sectors. However, we show that these sectorial differences could be large. If we consider media scrutiny (Panel A), the weight assigned to environment is equal to 7% for the banking sector, while it is five times higher for the sector Basic resources. Environment is also a major concern for chemical companies, but not for Health Care. For the other sectors, the

weight for environmental issues is rather uniform around 15%.

As expected, the differences across sectors are not so large for the other criteria, but they are still substantial. For social concerns, the highest weights, almost 50%, are for the traditional industries and services, e.g. Consumer goods and services, Industrial goods and Health Care. For corporate governance, the weight is the highest for the banking sector. Table **??** in appendix refines these results by using the widely used MSCI categories. In particular, it highlights that the differences between the sectors of the weights of a CSR-category could be very large and should not be ignored. For example, considering media concerns, the products' concerns are the most important in the Health Care sector (41%); whereas they represent only 6% for Basic resources. Comparing this weighting scheme with the one reported by Bansal et al. (2008), we see that the sectorial spectrum of the weights is comparable to our results for corporate governance (respectively 8%-22% versus 9%-24%), lower for environment, employees' relations or products, but larger for communities and human rights.

To illustrate the differences between sectors, we compute a double ratio equal to the percentage of E, S or G news for a given sector, divided by the corresponding percentage for all sectors. The interpretation is straightforward: a ratio higher than one means that the sector s is proportionally more subject to the criticism on a particular dimension of CSR: E, S or G. In figure 2.4 we present the results for three salient sectors: Banks, Basics resources and Consumer goods and services.

We have already noted that the sector Basics resources is the target of many bad news on environmental issues: the firms which compose this sector receive 60% more criticism on environmental issues than the others. Consequently, the proportion of bad news on social issues is 40% lower than in average. Banks and firms which provide consumers goods and services are in a similar situation, albeit on different issues. Banks are especially criticized for bad corporate governance practices but very little on environment (of course, financial activities are low polluting), while Consumer goods and services are criticized on the social aspects and relatively less on governance.

Table 2.5: **The weighting scheme, breakdown by sectors, MSCI categories**

	ENV	COM	HUM	DIV	EMP	PRO	CGOV
Panel A: Concerns							
Media scrutiny							
Banks	7%	17%	10%	3%	29%	10%	24%
Basic Resources	34%	18%	10%	0%	15%	6%	16%
Chemicals	35%	13%	4%	0%	10%	27%	11%
Consumer goods and services	16%	13%	7%	2%	34%	19%	9%
Health Care	2%	9%	2%	3%	21%	41%	22%
Industrial goods	18%	11%	4%	1%	45%	9%	13%
Technology	14%	8%	11%	1%	37%	9%	21%
NGO scrutiny							
Banks	30%	14%	16%	0%	9%	13%	19%
Basic Resources	36%	18%	20%	1%	6%	6%	13%
Chemicals	32%	13%	7%	0%	8%	24%	15%
Consumer goods and services	17%	12%	10%	2%	33%	17%	9%
Health Care	6%	11%	5%	0%	4%	38%	37%
Industrial goods	24%	14%	12%	0%	31%	2%	17%
Technology	24%	8%	22%	1%	23%	10%	13%
Panel B: Strengths							
Media scrutiny							
Banks	24%	36%	4%	3%	12%	13%	9%
Basic Resources	31%	32%	3%	1%	10%	9%	13%
Chemicals	37%	23%	3%	1%	7%	16%	14%
Consumer goods and services	32%	25%	3%	1%	13%	18%	8%
Health Care	7%	36%	5%	2%	9%	31%	11%
Industrial goods	53%	15%	1%	1%	7%	11%	12%
Technology	41%	20%	3%	1%	7%	15%	12%
NGO scrutiny							
Banks	28%	24%	7%	4%	13%	16%	8%
Basic Resources	30%	23%	10%	1%	11%	12%	12%
Chemicals	33%	25%	4%	2%	8%	16%	12%
Consumer goods and services	29%	19%	7%	2%	20%	14%	8%
Health Care	9%	39%	5%	2%	5%	27%	12%
Industrial goods	38%	19%	5%	1%	20%	9%	9%
Technology	37%	22%	5%	2%	12%	13%	10%

Source: Covalence-Ethicalquote. Authors' computation

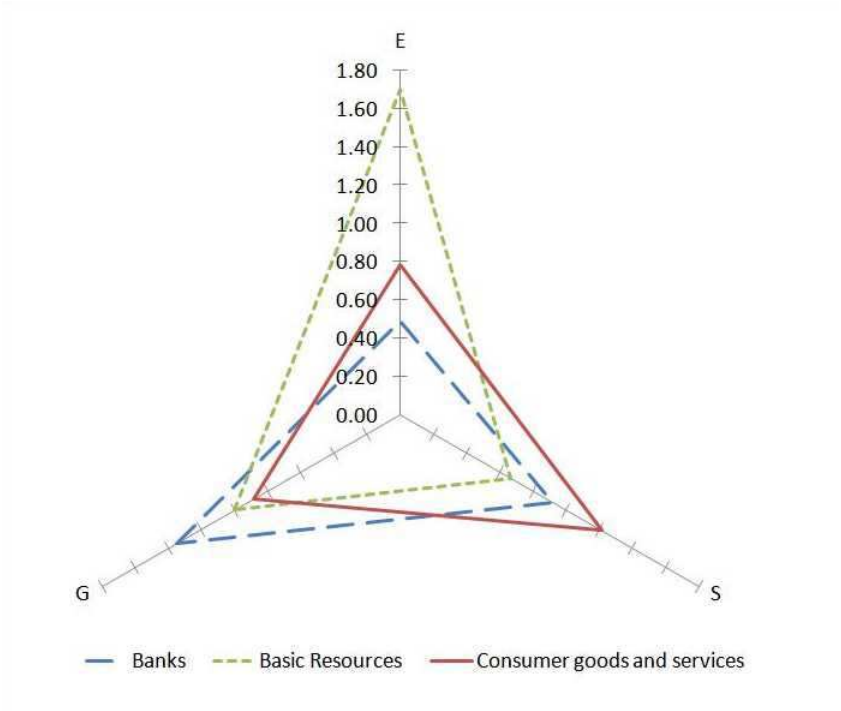

Figure 2.4: **Relative percentage of bad E, S and G news released by external sources.** This figure presents the percentage of E, S or G news for a given sector, divided by the corresponding percentage for all sectors. We restrict our sample to bad ESG news published by external sources. Data: Covalence. Sample period: 2002-2010. Authors' computation.

2.5 Conclusion

In this paper, we propose a new weighting scheme to aggregate E, S and G criteria and to provide a composite CSR score. We use a large database on ESG news to build a weighting scheme that is proportional to media and NGO scrutiny. The main advantage of our weighting scheme is that the weights are different across sectors, reflecting societal concerns. Thus, for instance, environmental issues are weighted more strongly for oil and gas firms than for the banking sector, while for the latter corporate governance concerns have more weight. Hence, this new weighting scheme can be used to better assess corporate social performance.

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Chapter 3

CSR Disclosures: Frontal Defence and Bypass Counter-attack

"*So in war, the way is to avoid what is strong and to strike at what is weak.*" SunTsu

Abstract

Corporate Social Responsibility does not only involve firms. Media and NGOs also disclose information about the firms' environmental, social or governance performance. In this battle for CSR information providing, each actor has her own objectives and communication strategies. In this chapter, we aim to provide the first empirical analysis of the strategies of CSR announcements. Using one of the largest CSR databases, Covalence-Ethicalquote, we prove that firms react to external disclosures. They defend frontally while they bypass counter-attack. When blamed by external sources on ESG issues (by receiving either fewer positive or more negative news), firms adopt a low-profile by disclosing less positive information on the ESG concern which is under-attacked. But they also counter-attack, by disclosing more positive information on the other ESG concerns. Firms apply the same combined strategies to external disclosures on their peers' ESG activities. These results confirm the intuition that firms "bypass-wash" their CSR, which extend the well-known concept of greenwashing. Firms also react to their peers' CSR disclosures. When peers communicate on major ESG concerns, firms herd and disclose more news on this major concern. Meanwhile, peers' communication on minor ESG concerns has a free-riding effect, it lowers a firm's disclosures. We also provide evidence that firms' CSR disclosures are double-edged. Both the public relations and the boomerang hypotheses are verified, with shades. Finally, we provide evidence that the game of disclosures between collaborative and vigilant NGOs works both ways.

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3.1 Introduction

During the last decade, there is a surge of Corporate Social Responsibility (CSR) disclosures all over the world. In particular, nowadays, most of the listed firms publish, along with their financial statements, annual CSR reports. This is a mandatory in Australia, in France or in South Africa, but in most of the cases, this is done on a voluntary basis. As of 2013, CorporateRegister.com lists approximately 50,000 CSR reports from thousands companies around the world. Hundreds of academic studies have scrutinized the content of such reports (for an overview of the literature, see Fifka, 2012). In a seminal study, Ernst and Ernst (1978) scrutinized environmental and social information contained in annual reports of the Fortune 500 companies between 1972 and 1978. In the 1970s already, a large majority of firms disclosed information related to environmental issues (78%), community involvement (72%) or fair business practices (77%). Guthrie and Parker (1990) used content analysis to study annual reports of 150 companies in the US, the UK, and Australia. They report that 98% of the UK companies, 85% of the US companies and 56% of the Australian companies had CSR disclosures in their annual reports. What about the potential benefit for the firms? Dhaliwal et al. (2009) find that firms with relatively superior social responsibility performance enjoy a reduction in the cost of equity capital. Further, they show that reporting firms are more likely to raise equity capital in the two years following the reporting and among firms raising equity capital, reporting firms raise a significantly larger amount than non-reporting firms. During the past decades, we have learned a lot about CSR reports. However, social responsibility disclosure is not limited to the publication of CSR annual reports: those are only the visible part of the iceberg.

Substantial information about the so-called ESG (environment, social and corporate governance) issues can be found elsewhere than in annual reports, whether traditional or standalone CSR reports (Zéghal and Ahmed, 1990; Campbell *et al.*, 2003; Jenkins and Yakovleva, 2006). Indeed, firms can disclose social and environmental information in many ways using booklets or leaflets dedicated to the promotion of the social and environmental activities of the firm. Further, more and more companies disclose continuously ESG information through electronic press releases and news display directly on their own website (Cormier *et al.*, 2006; Isenmann *et al.*, 2007; Jose and Lee, 2007; Morhardt, 2009). The web offers much more flexibility than tra-

ditional media for the presentation of ESG news and, as the cost of distribution is very small, it is possible for the firms to disclose much more information than previously and to communicate with a broader audience. Lastly, it allows the firms to be much more reactive.

This chapter is about strategical CSR disclosures. In particular, we examine the annual flow of information on Environmental, Social and corporate Governance (ESG) issues, released by the firms themselves, the media and the NGOs. CSR performance could have strategic roots, as developed for example by Siegel and Vitaliano (2007), Fernandez-Kranz and Santalo (2010) or Baron (2011). We choose to focus on the determinants of CSR disclosures, whatever the performance. In fact, both worst and best firms in terms of Corporate Social Performance release CSR information, partly because it is mandatory in certain countries, but also because non-disclosing also becomes a signal. We are mostly interested in the impact of one actor's (firm, media and NGO) level of disclosures on the other actors' strategy. We hypothesize that firms choose their level of CSR announcements according to the publication of ESG news by media or NGOs, while the latter also depends on the former.

We aim to provide the first empirical analysis of the yearly timing of firms' CSR announcements following external or peers' communication. Several papers has shown that the timing of information releases is a key ingredient in the communication process of the firms. But these papers consider only financial announcements, mostly earnings news. Most of this literature examines whether firms tend to announce bad news either just before the weekend or outside the trading hours and why. Two explanations have been proposed so far. On one hand, Patell and Wolfson (1982), Damodaran (1989), Bagnoli, Clement and Watts (2005) and Dellavigna and Pollet (2009) suggest that this opportunistic timing is an attempt to take advantage of investors inattention and to minimize the price impact of bad news. [1] On the other hand, Michaely, Rubin and Vedrashk (2011) consider that the aim is not to fool investors, but to give them more time to absorb the information so as to level the playing field amongst market participants. Another branch of the literature investigates the clustering of announcements. In a formal dynamic disclosure model, Acharya, DeMarzo and Kremer (2010) show that bad market news are likely

1. See also Gennotte and Trueman (1996) for a theoretical model.

to trigger immediate releases of information by firms, which generates clustering of announcements; conversely, good ones will slow down the release of information by firms. Tse and Tucker (2010) support these conclusions as they document clustering of bad news concerning earnings warnings. To our knowledge, there is no other empirical studies on the clustering of disclosure decisions, and *a fortiori* on the strategic timing of ESG information releases.

The definition of responsibility is often opposed in the recent academic literature to irresponsibility, which implies a strict separation between "good" and "bad" companies' ESG practices. Previous work already showed an asymmetry in the importance of positive and negative information, negative ones having for example a higher impact on financial markets. These results will be confirmed in the next chapter concerning ESG news impact on stock returns. But the dynamics governing the interaction between good and bad news have been little examined. Yet, some papers suggest that the relationship between positive and negative CSR practices are anything but random (Kotchen and Moon, 2012). In this chapter, we focus on the relationships between news released by the media and NGOs and positive corporate disclosures.

Journalists claim to be more prone to denounce corporate irresponsibility than to report environmental awards. They evoke their role of watchdog: "name and shame", this catchword fits well with the CSiR logic [2]. The Covalence-Ethicalquote database mitigate the importance of this role, with 44113 positive versus 25152 negative media disclosures included in this panel data. To compare the sectorial repartition of positive and negative external disclosures on one hand, and external and internal disclosures on the other hand, we can refine the results of the second chapter on the relative importance of the E, S, and G concerns by industry. Table 3.1 presents the shares of the disclosures of one sector on an ESG concern, compared to the total of information on this concern. It shows for example that the Basic resources sector is the most exposed to external criticism (25%), particularly on environmental issues (45%), whereas the Banking sector is the less exposed (9%), particularly on environmental issues (4%). Obviously, this general result depends on sectors' characteristics, like their size, but in comparison, only

2. For instance, according to Matthew Bishop, the Business editor of *The Economist*, *"For too long PR practitioners have expected journalists to jump on any story about a company doing something good. (...) we need hard evidence that CSR is more than just a fig leaf and that actions are being chosen because they are a good use of shareholders' money rather than merely being of personal interest to the CEO."*

10% of positive external environmental disclosures relate to Basic resources. If positive and negative external disclosures are quite similar for Consumer goods and services or Health care, they appear rather different for the other sectors.

The more a company is seen as virtuous, the more likely it is to be appreciated by consumers, employees and investors. But this issue is not completely ambivalent to business. Indeed, if a firm's reputation is good, it will be more publicized and subject to criticism, and in this sense, it is therefore better to have an average reputation within their industry (Luo, Meier and Oberholzer-Gee, 2010). To cope with increasing ESG concerns, companies have adapted their disclosures' strategy. In particular, they disclose more and more information concerning their social responsibility (see figure 1.3a). Obviously, it raises the question of the relevance of such news disclosures in a context of informational asymmetries. In one hand, companies have a clear informational advantage but, on the other hand, the credibility of firms' announcements is low given that they have an interest to distort information to their own benefit. Table 3.1 shows that most sectors disclose more positive information on the ESG concern which receives most positive external disclosures. It is verified for banks (S), Health Care (S), Industrial goods (E) and Technology (E). The differences between internal and external positives disclosures are not significant for the other sectors. Overall, except for Health Care, firms' disclosures are different to negative external disclosures.

There is a large body of anecdotal evidence suggesting that ESG news is used by the firms for green marketing, green public relations or even greenwashing. "The term is generally used when significantly more money or time has been spent advertising being green (that is, operating with consideration for the environment), rather than spending resources on environmentally sound practices" (see Karliner, CorpWatch 2001, for a history of greenwashing). Greenwashing might have many forms[3]. It can be defined theoretically by an asymmetry between the reputation provided by the company and the one relayed by external sources (Lyon and Maxwell,

3. *Hidden trade-off*, where the product is claimed green because of a single attribute without attention to other more important attributes, *no-proof*, where information is not easily verifiable, *vagueness*, *irrelevance*, *lesser of the two evils*, where environmental qualifiers are placed on products in which the entire product category is of questionable environmental value (green pesticides) or simple *fibbing* (classification of the former company *Terra Choice*).

Table 3.1: **External and internal disclosures, by ESG concern.**

Share of the disclosures of one sector on an ESG concern, compared to the total of information on this concern.

	Environment	**Social**	**Governance**	**ESG**
Panel A: External disclosures				
	Strengths			
Banks	5%	10%	7%	8%
Basic Resources	10%	12%	13%	11%
Chemicals	5%	5%	5%	5%
Consumer goods and services	21%	27%	24%	24%
Health Care	2%	14%	9%	8%
Industrial goods	26%	11%	15%	18%
Technology	31%	22%	27%	26%
All sectors	18389	18084	16385	44113
	Concerns			
Banks	4%	8%	11%	9%
Basic Resources	45%	18%	27%	25%
Chemicals	13%	7%	6%	7%
Consumer goods and services	16%	25%	19%	21%
Health Care	1%	13%	12%	10%
Industrial goods	9%	13%	8%	11%
Technology	11%	16%	17%	17%
All sectors	6142	12727	11792	25152
Panel B: Firms' positive disclosures				
Banks	6%	13%	8%	10%
Basic Resources	18%	15%	16%	16%
Chemicals	7%	5%	8%	6%
Consumer goods and services	16%	17%	18%	16%
Health Care	3%	22%	15%	15%
Industrial goods	20%	8%	13%	13%
Technology	29%	20%	23%	23%
All sectors	1694	2390	1872	4890

The last line of each group indicates the number of information for all sectors. The coloured figures indicate the highest concerns of the sectors.

2011). Moreover, Bazilier and Vauday (2009) distinguish "hard" and "soft" (non verifiable) information, and define hard greenwashing as communicating on CSR whereas not implementing CSR. They find that hard greenwashing to be a possible equilibrium, depending on the level of consumers' confidence. On a single ESG dimension, greenwashing is used in different ways by firms to improve their extra-financial reputation. However, we argue that firms use another way of improving their reputation: the bypass counter-attack. Therefore, greenwashing can be extended to "bypass-washing" a broader definition including not only the above definitions, but also the possibility of diversion, by a bypass communication. We first want to test if this intuition of "bypass-washing", inter-criteria extension of the greenwashing, is verified, applied by the firms.

In this chapter, we use thousands of ESG news concerning 100 listed firms over the period 2002-2010. These ESG news can be positive or negative, and they are released by media, NGOs or the firms themselves. This huge database has been provided by Covalence Ethicalquote (see chapter 1), an information provider that collects systematically ESG information concerning the world's largest companies. We find that firms time their CSR announcements according to the publication of news by media or NGOs on their activities or on their competitors' activities. Firms protect their credibility depending on the external disclosures about their ESG practices. But only frontally, on the ESG concern which is under attack. Simultaneously, they bypass counter-attack. When attacked on a given ESG concern, firms communicate more on the other ESG issues. They also apply these strategies to external disclosures about their peers' CSR activities, which could be interpreted as preemptive reaction strategies to external disclosures. Moreover, peers' communication on the sectoral major ESG concern has a frontal herding effect. When a firm's competitors communicate on major issues, the firm increase its CSR communication to major issues. However, firms adopt a free-rider posture on their peers' communication on minor ESG issues. Meanwhile, firms' disclosures are double-edged. Public relations are efficient, but communicating on ESG issues also incurs a boomerang effect. We then prove that good and bad cop NGOs are vigilant to each other's disclosures.

The reminder of the paper is organized as follows. We describe our hypotheses about the communication strategies of firms and their financial efficiency in section 2. The methodology

and the data are discussed in section 3. Empirical results are provided in section 4.

3.2 Strategic CSR Disclosures: A set of Hypotheses

3.2.1 Counter-Attack or low-profile?

> "*The more you are willing to accept responsibility for your actions, the more credibility you will have.*" Brian Koslow

What is the overall reaction strategy of firms towards external disclosures on their CSR? Do firms counter-attack, i.e., do they react to a high level of negative external disclosures (or a low level of positive information) by publishing more positive ESG information? Or do they protect their credibility, by adopting a low-profile towards external CSR information? We have to consider that firms disclose almost only positive ESG information (more than 90% with our data). If the media have disclosed less positive or more negative ESG news than usual, firms are expected to adopt a low-profile to keep their credibility, and then disclose less positive information. That is what we call the defence strategy, where firm communication follows the tide of external disclosures. We want to test if these credibility defence hypotheses are verified by analysing the determinants of positive firm disclosures. The opposite hypothesis of the defence is the counter-attack, where firm communication goes upstream.

> H_1, *Low-profile*: Firms react to a high level of media or NGO negative ESG disclosures (or to a low level of positive disclosures) by disclosing less positive ESG information.

3.2.2 Frontal and Bypass strategies

> "*Il faut, au lieu de force, user de finesse et de patience, attaquer l'erreur indirectement et sans paraître y penser.*"[4] Jean le Rond d'Alembert

We have seen previously that some sectors are less prone to be criticized on some criteria, for example environment for the Banking sector. It is therefore interesting to examine how firms react to media ESG news, depending on their sector of activity and, then, of their exposure

4. "We must, instead of force, use finesse and patience, and attack the error indirectly without seeming to think about it"

on each ESG concern. Based on the second chapter, we consider that one ESG criterion is the major concern for an industry. Corporate governance is the main concern for the banking and the technology sectors. Environment is the key of CSR in the basic resources and the chemical sectors. Social issues are predominant in consumer or industrial goods and services, and the health care sector.

Therefore we might distinguish frontal and bypass strategies. Frontal defence is when firms disclose less positive news on an ESG concern after that external sources disclosed more negative news (or less positive news) on the same ESG concern. A bypass counter-attack is when firms disclose more positive information on an ESG concern after that external sources disclosed more negative news (or less positive news) on another ESG concern.

> H_{2a}, *Frontal low-profile*: Firms react to a high level of media or NGO negative disclosures (or to a low level of positive disclosures) on an ESG concern by disclosing less information on the same concern.
>
> H_{2b}, *Bypass counter-attack*: Firms react to a high level of media or NGO negative disclosures (or to a low level of positive disclosures) on an ESG concern by disclosing more information on the other concerns.

A frontal low-profile strategy coupled with a bypass counter-attack would confirm the intuition of the bypass-washing. In this extension of the term greenwashing, firms do not try to improve their CSR reputation by disclosing soft information on their environmental activities, if they are mainly attacked on environmental issues for example. They rather claim to be virtuous on social or corporate governance issues.

3.2.3 Competition and communication

Firms could respond to media or NGO ESG disclosures, but also to their peers' ESG communication. We could assume that ESG communication has an herding effect, where firms follow their competitors' communication. We could also think that the firms benefit from the ESG reputation of their sector. If the sector's reputation has a positive effect on a firm's external reputation, a firm could have a free-rider posture. Then, a firm could be willing to reduce its

CSR communication when its peers raise their communication.

> H_3, *Herding* (conversely *Free-riding*): Firms react to a high level of their peers' ESG disclosures by disclosing more (less) positive ESG information.

3.2.4 A boomerang effect?

Communicating is risky. External sources and particularly "bad cop" NGOs could be more vigilant if firms disclose more positive ESG news. Baron and Diermeier (2007) and Baron (2009) state that companies with highly visible CSR activities face increased public scrutiny, and may experienced a "boomerang effect" in case of disappointment. Similarly, Lyon and Maxwell (2011) consider that "although companies naturally want to publicize their environmentally-friendly actions, they are often surprisingly hesitant to promote their environmental successes or to issue detailed environmental reports. Part of the reason appears to be that activists react more angrily to firms that lay claim to being virtuous, and then are discovered to have feet of clay, than to firms that never make such claims". We want to test if vigilance is the boomerang effect of communication, considering the more negative ESG news disclosed by media or NGOs, the more vigilant they are. The last chapter of this thesis shows that only negative events disclosed by the media have a short-term financial impact on firms' market value, which is negative. Then, a boomerang effect practised by the media should be more dangerous for firms than NGOs' reaction.

> H_4, *Boomerang effect*: Firms' positive disclosures raise the number of negative information that the media (or NGOs) publish on their ESG activities.

3.2.5 Public relations and reputation

On the opposite, firms positive disclosures can push external sources to disclose more positive information on their CSR. The next chapter highlights the influence of firms' media reputation on their financial losses following negative media events. The higher the firm reputation in the media, the lower the financial losses following the latter information. Consequently, firms have

interest in enhancing their ESG reputation, defined here as the ratio of positive information on the total of information (positive plus negative). Then, we test if firms' disclosures have a beneficial impact on their external positives disclosures, particularly the media.

> H_5, *Public relations*: Firms' positive ESG disclosures raise the number of positive information that the media (or NGOs) publish on their ESG activities.

In particular, if the hypothesis H_4 is verified for the media, firms could influence the level of media attacks on ESG issues. Therefore, firms could lower directly their financial losses occurring when negative news concerning their ESG practices are disclosed by the media (see next chapter). Moreover, if the hypothesis H_5 is verified for the media, the tool of communication would be rather used by the firms to raise their external ESG reputation, which leads indirectly to financial gains because it lowers the shareholders' losses occurring after media attacks.

3.2.6 NGOs Strategies : "Bad Cops" versus "Good Cops"

Following notably Lyon (2010), we distinguish two broad types of NGOs' strategies : either they collaborate with firms and disclose more positive ESG news, or they prefer to adopt a watchdog role and report rather negative ESG news. To simplify the analysis of NGOs' strategies, we assume that good cops only disclose positive ESG news and bad cops only negative ones. Good and bad cops could have a similar objective, the optimization of a overall level of CSR for example. But their means are different and we expect to find differences in their communication strategies. Chiroleu-Assouline (2010) show that NGOs could also have a paradoxical effect of discouraging the environmental differentiation efforts of the firms, by encouraging the consumers' scepticism. Then we try to understand what drives the disclosures behaviours of these two types of NGO. The public relations hypothesis assumes that good cops react to the communication of the firms they deal with, whereas the boomerang hypothesis assumes that bad cops particularly scrutinize firms after the latter disclose more ESG news. Afterwards, we test if NGOs' care about their media credibility and if they react to each others' disclosures.

Media Credibility of NGOs'

Are their ESG disclosures in line with ESG news previously disclosed by the media ? Is there a difference between "bad" and "good cops"? We presume that the latter should be more concerned by their credibility because generally positive information seem less credible than negative information. In fact, positive information could rather be linked to inputs, means, and negative information to outputs, results.

> H_6: NGOs, particularly good cops, disclose more positive ESG news on a company after the media disclosed more positive or less negative ESG news.

NGOs' Competition

As we identify two main groups of NGOs that adopt different strategies, we wonder how "good cops" disclosures affect "bad cops" ones and vice-versa. As developed by Baron (2011), "good cop" disclosures could be considered by firms as a shield against "bad cops" attacks, because a collaboration between a firm and an NGO enhance the legitimacy of firms communication. The distinction between good and bad cops can also be analysed in terms of radicality, the latter being more radical. Then, the most radical group could doubt about the former positive disclosures and therefore play a watchdog role towards collaborative NGOs. We test if "bad cops" are vigilant to "good cops" level of disclosures. The former could apply a boomerang effect all-round, frontal or , less expected, bypass.

> H_7, *Inter NGOs' boomerang*: The more the positive NGOs' ESG news, the more the negative NGO's ESG news the following year.

Figure 3.1 sums up these seven hypotheses. To test them, we use a wide and original database on CSR: Covalence Ethicalquote.

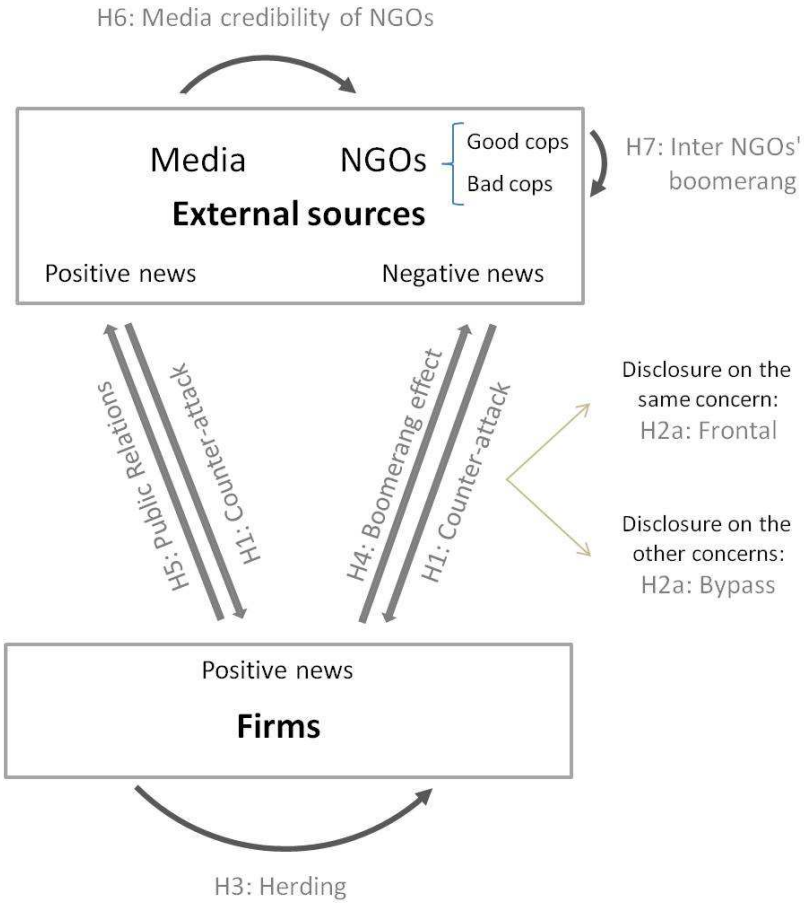

Figure 3.1: **Firms' ESG disclosures strategies: Hypotheses**
Arrows go from the independant to the dependant variables.

3.3 Data on ESG news and methodology

3.3.1 Covalence Ethicalquote

The potential number of ESG news disclosed on public firms is huge: dozens are published almost every day for each firms, whether by media, NGOs, consultants or the firms themselves. In this study, we use an original database provided by Covalence SA. Created in 2001 in Geneva (Switzerland), Covalence has developed, in partnership with Datadoxa, a systematic collect of positive and negative ESG information concerning the world's largest companies. The news are collected on the web. The range of ESG news is actually very broad. Positive news (Good news) include, for instance, announcement of a social sponsoring program, the launch of new eco-innovative product, a green award, etc. Negative news (Bad news) goes from toxic release disclosure to rumors of downsizing, through the divulgation of bad labor practices in subcontractor factories... See chapter 1 for a more detailed presentation.

Figure 2.3 presents, for each sector, and for the whole period, the average number of good news (top) and the average number of bad news (bottom) by firm and by distinguishing E, S and G. The average number of ESG news by firms is relatively homogeneous across sectors although it varies from 562 (Banks) to 918 (Consumer Goods and Services). Actually, differences across sectors are more pronounced if we consider only bad news or environmental news. While the average number of good ESG news ranges from a ratio of 1 to 1.7, bad ESG news may triple from one sector (Technology) to another (Basic resources). More formally, the dispersion (computed as the standard deviation of the the average number of ESG news by firms across sectors, divided by the average number of ESG news for the whole sample) is twice as high for good news than for bad news (0.23 against 0.41). Further, if we restrict to bad environmental issues, the average number of news may vary by a factor of eight depending on the sectors! This is not surprising as social or corporate governance issues is a concern for all companies whatever their sector of activity, while environmental news is more a concern for some industries (such as "Basic resources") than for others (like "Banks").

We want to conduct yearly panel regressions with company fixed effects. We do not consider

idiosyncratic effects of each media or NGO, but we focus on the information that all media and NGOs disclose on each company, every year between 2002 and 2010. Table 3.2 shows the descriptive statistics for the number of news disclosed each year by company, by the different sources. Figure 3.2 presents the densities of these variables.

Table 3.2: **Number of news by year and company, summary statistics.**

Source			**Mean**	**Std. Dev.**	**Min.**	**Max.**
Firm	Negative	Major concern	0.226	0.600	0	7
		Minor concerns	0.330	0.763	0	7
	Positive	Major concern	2.385	2.894	0	24
		Minor concerns	4.322	4.185	0	23
Media	Negative	Major concern	38.655	46.423	0	335
		Minor concerns	13.446	20.117	0	319
	Positive	Major concern	16.528	21.762	0	263
		Minor concerns	19.057	21.302	0	164
NGOs	Negative	Major concern	0.986	1.455	0	8
		Minor concerns	1.695	2.037	0	15
	Positive	Major concern	1.998	3.179	0	24
		Minor concerns	2.997	5.216	0	41

Observations: 888

3.3.2 Methodology

We assume that the communication of the firms impacts the disclosures of the media and the NGOs and is impacted by them. To deal with the typical reverse causality problem with endogenous variables, we use a panel VAR (vector autoregressive) methodology. This technique combines the traditional VAR approach, which treats all the variables in the system as endogenous, with the panel-data approach, which allows for unobserved individual heterogeneity (see Canova and Ciccarelli, 2013, for a survey). We specify a first-order VAR model as follows:

$$y_{i,t} = \alpha_{d,v} y_{i,t-1} + \varepsilon_{i,t} \tag{3.1}$$

where $y_{i,t}$ is a five-variables vector PF, PM, NM, PO, NO representing the yearly number of ESG news disclosed by the firms (F), the media (M), or the NGOs (O), concerning positive (P) or negative (N) information. As each sector has one particular ESG concern, we define an alternative model where $y_{i,t}$ is a ten-variables vector, for each source and score we define M

as the major ESG concern and m for the two others concerns (the minor ones). We use fixed effects for each firm i and one lag for the independent variables. $\varepsilon_{i,t} = \beta_t + \gamma_i + u_{i,t}$ where β_t is a time effect; γ_i is a unit specific effect and $u_{i,t}$ a disturbance term. In some alternative models we also implement financial variables (debt, assets, sales, number of employees) but without surprise in this framework, they are not significant. A limitation of this technique in our context is the shape of our variables, particularly for the yearly number of disclosures of the firms and the NGOs about the firms. A Poisson shape seem more suited than a gaussian one, but is not compatible with panel VAR regressions. Thus, we use Poisson regression in a second time, which do not assume the endogeneity of the dependant variables.

3.4 Results

3.4.1 Firm Strategic Disclosures

Panel VAR regressions in table 3.3 assumes that all variables are interdependent, in contrary of tables 3.4 and 3.10, showing the results of Poisson regressions which do not assume time-interdependency of the variables, but that fits better the shape of the variables [5].

Frontal low-profile

Firms are more likely to apply frontal low-profile strategies. When a firm receives few external praises on a ESG concern, it discloses less positive information on this concern. Indeed, the relationship between the past yearly number of positive news disclosed by NGOs on major ESG concerns on one hand, and the yearly number of positive firms' disclosures on these major concerns on the other hand, is positive and statistically significant (coefficient: 0.315). Seemingly, the more the past yearly number of positive media information on the minor ESG concerns, the more the number of positive firm disclosures on these minor concerns (coefficient: 0.047). Hypothesis H_{2a} is verified, firms adopt a frontal low-profile towards positive external information.

5. We also provide panel VAR regressions of restricted models in tables 3.7, with firm and media disclosures only; 3.9, with media and NGOs' disclosures only; and 3.8, with firm and NGOs' disclosures only.

Table 3.3: **Firm, media and NGO ESG disclosures on major and minor concerns: panel VAR regressions.**

688 used observations, yearly number of news. Independent variables (in rows) are lagged once.

	Firm		Media				NGO			
	Positive		Positive		Negative		Positive		Negative	
	Major	minor	Major	minor	Major	minor	Major	minor	Major	minor
Pos. Firm Major	0.297	0.004	0.422	-0.015	0.144	0.147	0.074	0.035	0.101	0.071
	(0.069)	(0.068)	(0.271)	(0.395)	(0.305)	(0.266)	(0.038)	(0.039)	(0.050)	(0.081)
	***						*		**	
Pos. Firm minor	-0.051	0.263	-0.134	0.029	-0.185	-0.674	-0.041	0.034	0.045	0.064
	(0.043)	(0.065)	(0.306)	(0.521)	(0.268)	(0.272)	(0.024)	(0.034)	(0.050)	(0.070)
		***				**	*			
Pos. Media Major	0.017	-0.052	0.302	-0.242	0.076	-0.030	0.031	0.007	-0.007	-0.023
	(0.017)	(0.021)	(0.098)	(0.180)	(0.163)	(0.142)	(0.010)	(0.012)	(0.022)	(0.029)
		**	***				***			
Pos. Media minor	-0.002	0.047	0.148	0.704	0.072	0.019	-0.014	-0.014	0.007	0.017
	(0.010	(0.012	(0.062	(0.093	(0.109	(0.083	(0.006	(0.008	(0.011	(0.015
		***	**	***			**	*		
Neg. Media Major	-0.002	0.039	-0.096	0.171	0.361	0.055	-0.022	-0.017	-0.009	-0.005
	(0.017)	(0.024)	(0.124)	(0.217)	(0.149)	(0.141)	(0.010)	(0.013)	(0.017)	(0.025)
		*			**		**			
Neg. Media minor	-0.009	-0.014	0.204	0.271	-0.125	0.213	-0.011	-0.004	-0.001	0.042
	(0.015)	(0.028)	(0.086)	(0.163)	(0.202)	(0.223)	(0.009)	(0.012)	(0.032)	(0.048)
			**	*						
Pos. NGO Major	0.315	0.200	0.666	0.747	0.020	1.310	0.126	-0.105	0.244	0.401
	(0.123)	(0.135)	(0.525)	(0.881)	(0.652)	(0.623)	(0.063	(0.076)	(0.126)	(0.190)
	**					**	**		*	**
Pos. NGO minor	-0.224	0.118	-0.528	-1.103	-0.704	-1.531	0.008	0.127	0.085	0.383
	(0.109)	(0.138)	(0.722)	(1.173)	(0.644)	(0.683)	(0.065)	(0.077)	(0.102)	(0.170)
	**					**		*		**
Neg. NGO Major	0.060	0.182	-0.221	-0.985	0.156	-0.544	0.032	-0.081	0.334	0.169
	(0.065)	(0.089)	(0.422)	(0.819)	(0.519)	(0.569)	(0.039)	(0.077)	(0.107)	(0.169)
		**							***	
Neg. NGO minor	-0.012	-0.062	-0.155	-0.304	-0.570	-0.796	0.017	0.051	0.038	0.401
	(0.043)	(0.059)	(0.205)	(0.391)	(0.257)	(0.311)	(0.024)	(0.035)	(0.059)	(0.095)
					**	**				***

Standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 3.4: **Firm, media and NGO ESG communication on major and minor concerns: Poisson regressions.**

Yearly panel Poisson regressions with firm and year fixed effects.
Independent variables (in rows) are lagged once. 100 firms between 2002 and 2010.

	Firm		Media				NGO			
	Positive		Positive		Negative		Positive		Negative	
	Major	minor	Major	minor	Major	minor	Major	minor	Major	minor
Pos. Firm Major	.029	.009	.036	-.0007	.038	.023	.034	.028	.026	.006
	(.010)***	(.009)	(.004)***	(.003)	(.005)***	(.005)***	(.017)**	(.015)*	(.014)*	(.012)
Pos. Firm minor	.010	.016	-.006	.019	-.020	-.021	-.014	.011	-.003	-.009
	(.008)	(.006)***	(.003)*	(.002)***	(.004)***	(.003)***	(.014)	(.010)	(.009)	(.007)
Pos. Media Major	.0008	-.0004	-.0007	-.003	-.002	-.002	.002	.0001	-.002	.002
	(.002)	(.002)	(.0007)	(.0005)***	(.0009)**	(.0009)*	(.004)	(.003)	(.003)	(.003)
Pos. Media minor	.005	.005	.004	.003	.0003	-.00009	.008	.002	.0002	-.002
	(.001)***	(.0008)***	(.0004)***	(.0002)***	(.0005)	(.0004)	(.002)***	(.001)	(.001)	(.001)
Neg. Media Major	-.006	.0003	-.004	.001	.003	.002	-.002	.006	.003	-.0006
	(.003)**	(.002)	(.0008)***	(.0005)**	(.0008)***	(.0008)**	(.004)	(.003)**	(.003)	(.003)
Neg. Media minor	.005	-.002	.006	-.0009	-.002	.0007	-.007	-.003	.004	.009
	(.002)**	(.002)	(.0008)***	(.0005)*	(.0008)***	(.0006)	(.004)*	(.003)	(.002)*	(.002)***
Pos. NGO Major	.082	.010	.060	.037	.048	.088	-.030	-.032	.048	.033
	(.018)***	(.016)	(.007)***	(.005)***	(.008)***	(.007)***	(.027)	(.023)	(.021)**	(.018)*
Pos. NGO minor	-.059	.014	-.019	.021	-.025	-.007	.036	.024	.0001	.029
	(.015)***	(.010)	(.005)***	(.003)***	(.006)***	(.005)	(.020)*	(.014)*	(.014)	(.012)**
Neg. NGO Major	.019	.026	.022	-.001	.029	-.001	.027	-.031	-.0004	-.015
	(.013)	(.010)***	(.005)***	(.004)	(.005)***	(.004)	(.019)	(.015)**	(.011)	(.009)
Neg. NGO minor	-.0001	-.012	.002	.016	.003	.015	.022	.024	-.011	-.004
	(.008)	(.006)*	(.004)	(.003)***	(.004)	(.003)***	(.013)*	(.009)***	(.007)	(.005)
Obs.	788	788	788	788	788	788	748	788	780	783
Log Likelihood	-1228.094	-1729.174	-2996.055	-4655.381	-3249.16	-3466.845	-731.628	-1023.472	-976.205	-1102.036

Robust standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Bypass Counter-attack

We find in table 3.3 that firms do not counter-attack frontally. When their reputation (for both positive and negative disclosures) is low on their major ESG concern, they do not try to improve their reputation by disclosing more ESG news. The frontal strategy is always the defence. Defence against the risk of loosing their credibility towards NGOs for their major concerns, or the media for their minor concerns. Firms may consider that a frontal counter-attack is too risky, but they are prone to bypass counter-attack. Indeed, the relationship between the past yearly number of negative news disclosed by the media or NGOs on major ESG concerns on one hand, and the yearly number of positive firms' disclosures on the minor concerns on the other hand, is positive and statistically significant (coefficient: 0.039 and 0.182 for media and NGO respectively). This result holds when we consider a decrease of positive ESG news from the media on major ESG concerns (coefficient: -0.052) or a decrease of NGOs' positive news on the minor concerns (coefficient: -0.224).

This result is more obvious for the response on the minor concerns after a loss of reputation on the major one. For example, a firm in the oil sector which experiments a loss of its environmental reputation will disclose more positive news on its social or governance performance the following year. More exactly, firms try to compensate a rise of negative disclosures on its major ESG concern by the media or NGOs, or a decline of positive media disclosures, by disclosing more positive news on its minor concerns.

We also remark in table 3.3 that after NGOs have disclosed a low level of positive information of the minor concerns, firms tend to communicate more on their major concern. This result is robust according to table 3.4. We can assume that firms think that positive NGO disclosures on their minor concerns are valuable, but also that the major concern principally matters for "good cop" NGOs. Therefore, firms try to show to the latter that they make substantial efforts on their major concern, considering the credibility effect on this major concern. They try to improve their image towards NGOs so that they disclose more positive information on the minor concerns. This hypothesis is difficult to test here, but could be a good start for future research, but we will see that if this hypothesis concerning firms beliefs is verified, firms quite misunderstand NGOs

disclosures strategies. We can sum up the main robust results determining firm communication strategies. Firms defend their credibility frontally, but when their reputation is hurt, on their major concern essentially, they counter-attack on the other criteria, using a bypass strategy.

Clustering effect

Previous research on companies' disclosures strategies shows that firms have incentives to force their competitors to disclose information (see De Marzo et al., 2011). In table 3.5, we test for this hypothesis in our CSR disclosures framework with yearly panel data. Firms react to their their sectoral competitors' disclosures, but also on external disclosures on their competitors' ESG practices. The more the competitors disclose information on the sectoral major concern, the more a firm communicates on this major concern. We could analyse this result as a herding phenomenon, firms have incentives to follow their peers' communication on their major ESG concerns. Meanwhile, the more the competitors disclose information on the sectoral minor concerns, the less a firm communicate, all-round. If we consider that firms' communication has a cost, but is favourable to firms and their competitors, this last result could be interpreted as a free-riding process. Moreover, firms react to external disclosures on their peers' ESG activities. Firms adopt a frontal low-profile (for both positive and negative news) on minor concerns towards media and NGOs' disclosures on their peers. They also bypass counter-attack towards NGOs' disclosures on their peers. Overall, firms adopt the same strategy towards external disclosures on their own ESG activities on one hand, and on their ESG peers' activities on the other-hand: the frontal defence combined with the bypass counter-attack.

The results on the firms' reaction strategies are summed up in table 3.6. One remaining question is about the impact of firms' disclosures on external sources.

Table 3.5: **Firms' positive disclosures' determinants with clustering effect.**

Yearly panel Poisson regressions with firm and year fixed effects.
Independent variables (in rows) are lagged once. 100 firms between 2002 and 2010.

	Major	minor	Major	minor	Major	minor
			Disclosures on firm's ESG practices			
Positive Firm on Major concerns	.0005	.012			.013	
	(.011)	(.009)			(.009)	
Positive Firm on minor concerns	.014	.013				.018
	(.009)	(.006)**				(.005)***
Positive Media on Major concerns	.002	.002				.003
	(.003)	(.002)				(.002)
Positive Media on minor concerns	.002	.002				.002
	(.001)	(.001)**				(.0009)**
Negative Media on Major concerns	-.0005	-.0008				-.0009
	(.003)	(.002)				(.002)
Negative Media on minor concerns	.002	.0003				.0002
	(.003)	(.002)				(.002)
Positive NGO on Major concerns	.068	.020			.071	
	(.019)***	(.017)			(.019)***	
Positive NGO on minor concerns	-.045	.017			-.035	
	(.015)***	(.010)*			(.015)**	
Negative NGO on Major concerns	.008	.023				.026
	(.013)	(.010)**				(.010)***
Negative NGO on minor concerns	-.010	-.020				-.020
	(.009)	(.006)***				(.006)***
			Disclosures on ESG practices of firm's sectoral competitors			
Positive Firm on Major concerns	.013	.001	.016	.002	.014	.002
	(.003)***	(.003)	(.003)***	(.003)	(.003)***	(.003)
Positive Firm on minor concerns	-.005	-.003	-.004	-.002	-.004	-.004
	(.002)***	(.001)***	(.002)**	(.001)*	(.002)**	(.001)***
Positive Media on Major concerns	.0002	.0003	.0004	.0003	.0002	.0003
	(.0005)	(.0004)	(.0005)	(.0003)	(.0005)	(.0004)
Positive Media on minor concerns	.0003	.0005	.0003	.0007	.0004	.0005
	(.0002)	(.0002)***	(.0002)	(.0001)***	(.0002)*	(.0002)***
Negative Media on Major concerns	-.0005	.00009	-.0003	.0001	-.0005	.00008
	(.0006)	(.0004)	(.0006)	(.0004)	(.0006)	(.0004)
Negative Media on minor concerns	-.0003	-.001	-.0005	-.002	-.0004	-.001
	(.0005)	(.0003)***	(.0004)	(.0003)***	(.0004)	(.0003)***
Positive NGO on Major concerns	.006	-.017	.005	-.017	.004	-.015
	(.006)	(.004)***	(.006)	(.004)***	(.006)	(.004)***
Positive NGO on minor concerns	-.008	.015	-.009	.014	-.008	.014
	(.004)**	(.003)***	(.004)**	(.003)***	(.004)**	(.003)***
Negative NGO on Major concerns	.003	.016	.004	.015	.004	.015
	(.003)	(.002)***	(.003)	(.002)***	(.003)	(.002)***
Negative NGO on minor concerns	.007	-.006	.006	-.005	.006	-.005
	(.002)***	(.002)***	(.002)***	(.002)***	(.002)***	(.002)***
Obs.	788	788	788	788	788	788
Log Likelihood	-1167.963	-1676.485	-1183.714	-1709.349	-1173.695	-1680.52

Robust standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 3.6: **Results on companies' CSR disclosures strategies.**

				Firm's CSR communication strategies for the ESG	
Target of the reaction	Source of information	Type of information	ESG concern	Major concern	minor concerns
Firm's own *ESG practices*	Media	Positive	Major		*Bypass CA*
			minor		Frontal D
		Negative	Major		*Bypass CA*
			minor		
	NGOs	Positive	Major	Frontal D	
			minor	Bypass CA	
		Negative	Major		Bypass CA
			minor		
Firm's competitors' *ESG practices*	Firms	Positive info.	Major	Herding	
			minor	Free-riding	
	Media	Positive	Major		
			minor		Frontal D
		Negative	Major		
			minor		Frontal D
	NGOs	Positive	Major		Bypass CA
			minor	Bypass CA	Frontal D
		Negative	Major		Bypass CA
			minor	Bypass CA	Frontal D

D for defence, CA for counter-attack. Strategies in italic are not robust in Poisson regressions 3.10.

3.4.2 Public relations and boomerang effect

We cross tables 3.3, 3.8, 3.9 and 3.4 to determine media and NGOs' disclosures strategies. There is no evidence that firms' public relations are considered by the media. Indeed, we can not say that media positive disclosures are influenced by firms' disclosures. However, firms' positive disclosures on their major ESG concern increase good cops' disclosures on this concern. Hence, public relations are useful to obtain more praises from the collaborative NGOs, especially on the major ESG concern.

However, firms' disclosures also influence their level of future external attacks. We have to consider separately the reactions of the media and the NGOs. Firms' disclosures on minor ESG concerns lower the media negative disclosures on these concerns. Therefore, communicating on minor issues is efficient. Meanwhile, communicating on major ESG issues raise bad cops' attacks, frontally. If the media attacks could be favorably influenced by the firms on minor ESG issues, bad cop NGOs are mostly vigilant on the sectorial major ESG issues. The latter play a watchdog role by applying a boomerang effect. We see in table 3.10 that firms' peers' disclosures on the sectorial major ESG concern raise the media attention, all-round, for both positive and negative information. Nevertheless, peers' disclosures on the minor concerns lower external sources' disclosures, which can explain the free-riding effect on firms' disclosures on minor concerns. Then, we investigate the other determinants of NGOs' disclosures strategies, their reactions to the media disclosures and the competition between the two broad types of NGOs (collaborative/vigilant).

3.4.3 NGOs' Disclosures Strategies: a both ways competition

We have seen that firms disclosures on the ESG major concern raise frontally both good and bad cops' disclosures. Now, we look at the NGOs' reaction to media disclosures. Comparing panel-VAR and Poisson regressions, we do not have robust evidence that media disclosures on firms' ESG activities influence NGOs' disclosures. However, we find that good and bad cops react to each others' disclosures. In particular, NGOs' positive disclosures increase NGO's negative disclosures, mainly frontally. This support the hypothesis of the watchdog role played by the

bad cops towards, not only firms, but also good cops. But the game between collaborative and vigilant NGOs works both ways. When bad cops disclose more information, particularly on ESG minor concerns, good cops disclose more information all-round. If this result is not significant in table 3.3, it is in the robustness regressions, notably in the closed-panel VAR regression 3.8 without regard to media disclosures. Thus, if NGOs do not seem to care about their media credibility, there is a disclosures' competition between good and bad cops that works both ways.

3.5 Conclusion

What is the rationale behind voluntary disclosures? What are the expected benefits for firms which spend resources on processing and providing extra-financial information? Previous researches suggest that companies' CSR disclosures aim notably to enhance their reputation. Moreover, some sectors are more prone to be criticized on a single ESG dimension. For example, banks are mostly attacked on corporate governance issues. This chapter examines the ESG disclosures strategies of firms, media and NGOs. We develop an empirical study of the annual flow of ESG news that they release. To that end, we use panel VAR methods, Poisson regressions, and the Covalence-EthicalQuote database which counts, after several filters, more than 75,000 ESG news concerning 100 listed companies on the period 2002-2010.

We demonstrate that firms care about the credibility of their disclosures, i.e. they adopt a low-profile and disclose less CSR information when they obtain a bad external reputation. But only frontally, i.e. on the same ESG concerns. More precisely, they care about their credibility towards collaborative NGOs on their sectoral major ESG concern, for example governance for banks ; while the media are the target of their credibility for ESG minor concerns. Simultaneously, firms also try to lower a reputation loss on a given ESG concern by communicating more on the other concerns. They bypass counter-attack, especially when their media reputation is hurt on their major ESG concern. These results confirm the intuition that firms "bypass-wash" their CSR, which extend the well-known concept of greenwashing. The multidimensionality of CSR allows companies to hide the visibility of their counter-attacks against external news to restore their reputational shield.

We observe similar results for firms' reactions towards external disclosures on their peers' ESG activities. Firms adopt a frontal low-profile towards media and NGOs' disclosures on ESG minor concerns and bypass counter-attack towards NGOs' disclosures. Firms also react to their peers' disclosures. When peers communicate on major ESG concerns, firms herd frontally and disclose more information on this major concern. Meanwhile, peers' communication on minor ESG concerns has a free-riding effect, it lowers a firm's disclosures.

We also provide evidence that firms' CSR disclosures are double-edged. On major ESG concerns, they raise both NGOs' positive and negative information, frontally. Both the public relations and the boomerang hypotheses are verified. On the minor ESG concerns, firms' disclosures are rather efficient. They lower the media attacks on these minor concerns. Moreover, firms' peers' disclosures on major and minor issues respectively raise and lower the media attention all-round, for both praises and attacks, which can explain the herding and the free-riding attitudes of firms towards their peers' disclosures.

If NGOs do not seem to care about their credibility in the media, good and bad cops disclosures influence each other. We find not only that good cops' disclosures incur a bad cops' response, but also the contrary. Bad cops play a watchdog role towards good cops, mainly frontally. Good cops react to bad cops' disclosures on minor concerns, by disclosing more positive information on the firms' ESG activities. Hence, the game of disclosures between collaborative and vigilant NGOs works both ways.

Now that we better understand the CSR communication strategies of firms, and their impacts on media disclosures, it seems interesting to look deeper at the dynamics of these strategies. Previous research suggests that firm voluntary disclose information to preempt the announcement of bad news and reduce its negative impact, and force their competitors to disclose information too. This yearly panel analysis is not suited to answer these questions for CSR disclosures, but an investigation with information cascades should lead to further findings.

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Appendix

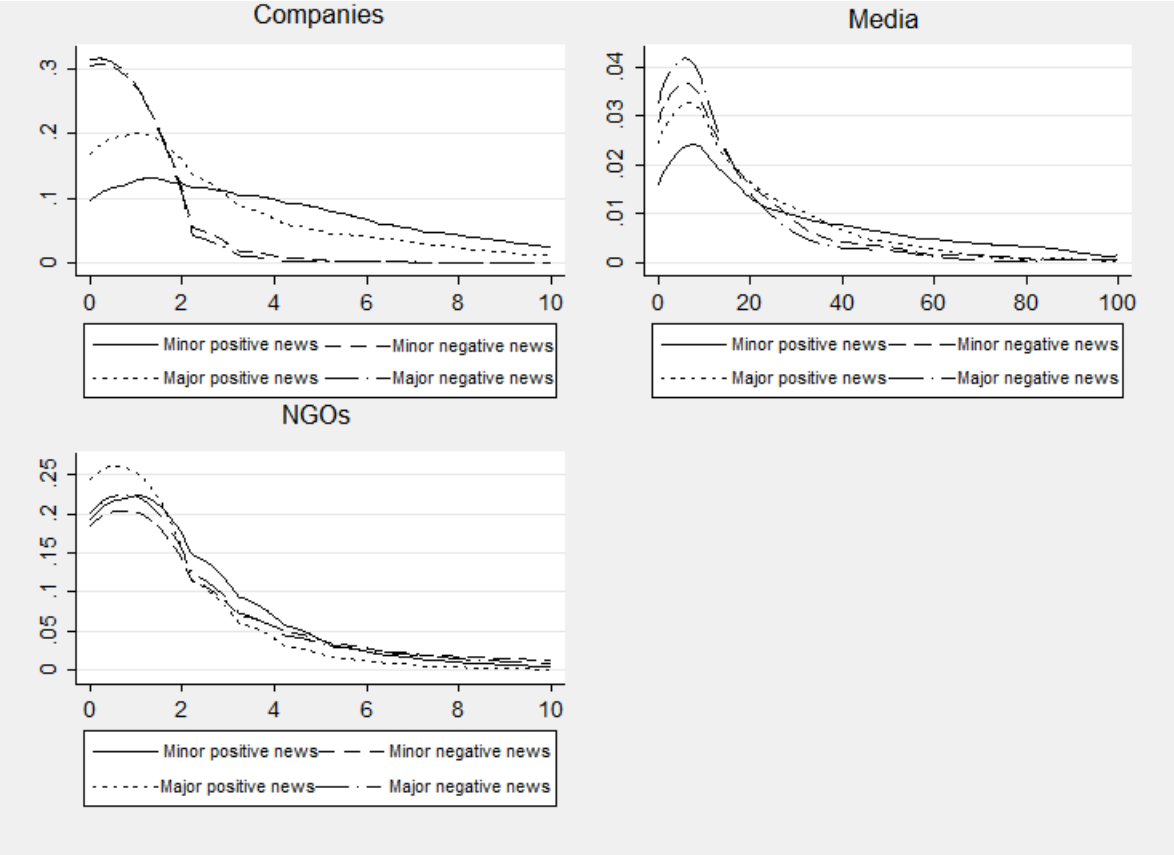

Figure 3.2: **Density of the yearly number of news disclosed by company.**
Epanechnikov Kernel

Table 3.7: **Firm and media ESG communication on major and minor concerns: panel VAR regressions.**

688 used observations, yearly number of news. Independent variables (in rows) are lagged once.

	Firm		Media			
	Positive		Positive		Negative	
	Major	minor	Major	minor	Major	minor
Pos. Firm Major	0.37	0.06	0.48	-0.12	0.12	0.18
	(0.07)	(0.07)	(0.31)	(0.47)	(0.32)	(0.30)
	***					
Pos. Firm minor	-0.05	0.26	-0.27	-0.32	-0.43	-1.20
	(0.05)	(0.08)	(0.37)	(0.67)	(0.33)	(0.37)
		***				***
Pos. Media Major	0.04	-0.04	0.34	-0.23	0.08	0.03
	(0.02)	(0.02)	(0.10)	(0.18)	(0.17)	(0.14)
	**	*	***			
Pos. Media minor	-0.02	0.03	0.16	0.79	0.13	0.11
	(0.01)	(0.01)	(0.05)	(0.09)	(0.12)	(0.10)
		***	***	***		
Neg. Media Major	0.00	0.04	-0.06	0.26	0.47	0.21
	(0.01)	(0.02)	(0.11)	(0.17)	(0.14)	(0.14)
		*			***	
Neg. Media minor	0.01	-0.01	0.13	0.03	-0.33	-0.15
	(0.03)	(0.05)	(0.17)	(0.33)	(0.30)	(0.35)

Standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 3.8: **Firm and NGO ESG communication on major and minor concerns: panel VAR regressions.**

688 used observations, yearly number of news. Independent variables (in rows) are lagged once.

	Firm		NGO			
	Positive		Positive		Negative	
	Major	minor	Major	minor	Major	minor
Pos. Firm Major	0.29	-0.04	0.09	0.06	0.10	0.06
	(0.07)	(0.07)	(0.04)	(0.04)	(0.05)	(0.07)
	***		**		**	
Pos. Firm minor	-0.07	0.08	0.00	0.13	0.04	-0.02
	(0.06)	(0.10)	(0.03)	(0.05)	(0.63)	(0.08)
				***		
Pos. NGO Major	0.33	-0.04	0.22	-0.02	0.23	0.30
	(0.13)	(0.13	(0.06)	(0.07)	(0.10)	(0.13)
	**		***		**	**
Pos. NGO minor	-0.25	-0.20	0.09	0.30	0.07	0.22
	(0.08)	(0.13)	(0.04)	(0.06)	(0.07)	(0.10)
	***		**	***		**
Neg. NGO Major	0.04	0.04	0.06	-0.01	0.31	0.09
	(0.05)	(0.11)	(0.03)	(0.06)	(0.10)	(0.14)
			*		***	
Neg. NGO minor	-0.01	-0.10	0.04	0.08	0.05	0.38
	0.04	0.06	0.02	0.03	0.05	0.08
		*	**	***		***

Standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 3.9: **Media and NGO ESG communication on major and minor concerns: panel VAR regressions.**

688 used observations, yearly number of news. Independent variables (in rows) are lagged once.

	Media				NGO			
	Positive		Negative		Positive		Negative	
	Major	minor	Major	minor	Major	minor	Major	minor
Pos. Media Major	0.33	-0.24	0.09	-0.01	0.04	0.01	0.00	-0.02
	0.10	0.18	0.17	0.15	0.01	0.01	0.02	0.03
	***				***			
Pos. Media minor	0.13	0.71	0.06	-0.04	-0.02	-0.01	0.01	0.02
	0.08	0.12	0.12	0.09	0.01	0.01	0.01	0.02
	*	***			***			
Neg. Media Major	-0.10	0.17	0.35	0.01	-0.02	-0.01	0.00	0.00
	0.13	0.23	0.15	0.15	0.01	0.01	0.02	0.03
			**		**			
Neg. Media minor	0.20	0.27	-0.12	0.22	-0.01	0.00	0.00	0.04
	0.09	0.16	0.20	0.23	0.01	0.01	0.03	0.05
	**	*						
Pos. NGO Major	0.85	0.75	0.05	1.21	0.15	-0.08	0.31	0.45
	0.58	0.94	0.69	0.67	0.07	0.08	0.13	0.20
				*	**		**	**
Pos. NGO minor	-0.59	-1.09	-0.80	-1.89	-0.01	0.15	0.11	0.42
	0.82	1.33	0.73	0.79	0.07	0.08	0.11	0.19
				**		*		**
Neg. NGO Major	-0.16	-0.98	0.11	-0.81	0.03	-0.05	0.38	0.22
	0.49	0.93	0.53	0.61	0.04	0.08	0.11	0.17
							***	
Neg. NGO minor	-0.20	-0.30	-0.59	-0.83	0.01	0.05	0.03	0.40
	0.21	0.39	0.25	0.32	0.02	0.03	0.06	0.09
			**	***				***

Robust standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 3.10: **Firm, media, NGO ESG communication on major and minor concerns and clustering effect.**

Yearly panel Poisson regressions with firm and year fixed effects.
Independent variables (in rows) are lagged once. 100 firms between 2002 and 2010.

	Firm		Media				NGO			
	Positive		Positive		Negative		Positive		Negative	
	Major	minor	Major	minor	Major	minor	Major	minor	Major	minor
Disclosures on firm's ESG practices										
Positive Firm on Major concerns	.0005	.012	.010	-.010	.027	-.003	.020	.022	.015	-.001
	(.011)	(.009)	(.004)**	(.003)***	(.005)***	(.005)	(.018)	(.015)	(.014)	(.013)
Positive Firm on minor concerns	.014	.013	-.001	.013	-.010	-.005	-.004	.019	.0006	-.00008
	(.009)	(.006)**	(.003)	(.002)***	(.004)**	(.004)	(.015)	(.010)*	(.009)	(.008)
Positive Media on Major concerns	.002	.002	-.002	-.001	-.0006	-.0009	.002	-.001	-.001	-.0007
	(.003)	(.002)	(.0008)***	(.0006)**	(.001)	(.001)	(.004)	(.003)	(.003)	(.003)
Positive Media on minor concerns	.002	.002	.003	.0006	.0005	-.00006	.007	.002	.001	.0004
	(.001)	(.001)**	(.0004)***	(.0003)**	(.0005)	(.0005)	(.002)***	(.002)	(.002)	(.002)
Negative Media on Major concerns	-.0005	-.0008	-.0005	.001	.003	.003	.001	.007	.002	-.001
	(.003)	(.002)	(.0008)	(.0006)*	(.0008)***	(.0008)***	(.005)	(.003)**	(.003)	(.003)
Negative Media on minor concerns	.002	.0003	.003	.001	-.005	-.0006	-.011	-.002	.004	.008
	(.003)	(.002)	(.0009)***	(.0006)**	(.0008)***	(.0007)	(.005)**	(.003)	(.003)	(.002)***
Positive NGO on Major concerns	.068	.020	.047	.030	.039	.063	-.048	-.048	.040	.012
	(.019)***	(.017)	(.007)***	(.006)***	(.009)***	(.008)***	(.028)*	(.024)*	(.022)*	(.019)
Positive NGO on minor concerns	-.045	.017	-.0009	.031	-.023	-.004	.040	.020	-.006	.028
	(.015)***	(.010)*	(.005)	(.003)***	(.006)***	(.006)	(.021)*	(.015)	(.015)	(.012)**
Negative NGO on Major concerns	.008	.023	.012	-.006	.029	-.005	.044	-.017	.001	-.007
	(.013)	(.010)**	(.005)**	(.004)	(.006)***	(.005)	(.020)**	(.015)	(.012)	(.010)
Negative NGO on minor concerns	-.010	-.020	-.001	.006	.010	.018	.011	.021	-.010	.001
	(.009)	(.006)***	(.004)	(.003)**	(.004)***	(.003)***	(.013)	(.010)**	(.007)	(.006)
Disclosures on ESG practices of firm's sectoral competitors										
Positive Firm on Major concerns	.013	.001	.007	.004	.018	.010	.021	.004	.006	.006
	(.003)***	(.003)	(.001)***	(.001)***	(.002)***	(.001)***	(.006)***	(.004)	(.004)	(.003)*
Positive Firm on minor concerns	-.005	-.003	-.003	-.003	-.011	-.008	-.010	-.008	-.004	-.008
	(.002)***	(.001)***	(.0007)***	(.0005)***	(.0009)***	(.0008)***	(.003)***	(.002)***	(.002)*	(.002)***
Positive Media on Major concerns	.0002	.0003	-.0002	-.0003	-.0009	-.002	.003	.001	-.001	.0001
	(.0005)	(.0004)	(.0002)	(.0001)***	(.0002)***	(.0002)***	(.0009)***	(.0006)**	(.0007)**	(.0006)
Positive Media on minor concerns	.0003	.0005	.0006	.0007	.0003	.0007	-.0005	.0002	.0004	.0002
	(.0002)	(.0002)***	(.00008)***	(.00005)***	(.00009)***	(.00008)***	(.0004)	(.0003)	(.0003)	(.0003)
Negative Media on Major concerns	-.0005	.00009	-.00002	.0009	.0003	.0007	.0005	-.0007	-.0009	-.002
	(.0006)	(.0004)	(.0002)	(.0001)***	(.0002)	(.0002)***	(.001)	(.0008)	(.0009)	(.0008)**
Negative Media on minor concerns	-.0003	-.001	.0002	-.0009	-.0001	.0007	-.002	-.001	.0003	.0003
	(.0005)	(.0003)***	(.0002)	(.0001)***	(.0002)	(.0001)***	(.0009)***	(.0006)**	(.0005)	(.0005)
Positive NGO on Major concerns	.006	-.017	.005	-.004	-.012	.021	-.026	-.007	.019	.012
	(.006)	(.004)***	(.002)**	(.002)**	(.003)***	(.002)***	(.009)***	(.007)	(.007)***	(.006)**
Positive NGO on minor concerns	-.008	.015	-.013	-.002	.0007	-.014	-.001	-.003	-.010	-.009
	(.004)**	(.003)***	(.001)***	(.0009)*	(.002)	(.001)***	(.006)	(.005)	(.005)**	(.004)**
Negative NGO on Major concerns	.003	.016	.001	.001	.008	-.004	-.001	-.004	-.007	-.006
	(.003)	(.002)***	(.001)	(.0009)	(.001)***	(.001)***	(.005)	(.004)	(.004)*	(.003)**
Negative NGO on minor concerns	.007	-.006	.002	.003	-.003	.003	.009	.003	.005	.0003
	(.002)***	(.002)***	(.001)**	(.0007)***	(.001)***	(.0009)***	(.003)***	(.002)	(.002)**	(.002)
Obs.	788	788	788	788	788	788	748	788	780	783
Log Likelihood	-1167.963	-1676.485	-2627.701	-4304.307	-3099.162	-3163.873	-709.073	-1002.068	-962.499	-1072.616

Robust standard errors are reported in parentheses.
One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively. M. and m. respectively for Major and minor ESG concerns.

Chapter 4

Every Little Helps? ESG News Disclosure and Stock Market Reaction

"*Even the largest avalanche is triggered by small things.*" Vernor Vinge

Abstract

In this chapter, we investigate the extent and the determinants of the stock market's reaction subsequent to ordinary news disclosure on environmental, social and governance issues - the so-called ESG factors. To that purpose, we use an original database provided by Covalence EthicalQuote, concerning 100 listed firms on the period 2002-2010. On average, firms facing negative events experience a drop in their market value of 0.1% on a window of three days around the day of the announcement, whereas companies facing positive events do not experience a significant change in their market value. Our results suggest also that market participants only react to media sources of information. We then point out that some features of an event influence the extent of the shareholders losses. The goodwill hypothesis is verified: ESG reputation is a shield against future losses due to media attacks on ESG practices. Cultural proximity and lexical contents of CSR disclosures also play a significant role in the impact of CSR events.

Thanks to Fabrizio Coricelli, Marie-Aude Laguna, Thomas Lyon, and Yannick Le Pen as well as participants at the Informing Green Markets conference (Ann Arbor, 2011), the Mines-ParisTech workshop on the Economics of Corporate Social Responsibility (Paris, 2011), the UN-PRI Mistra conference (Sigtuna, 2011), the ESG seminar of the Ecole Polytechnique (Palaiseau, 2011), and the University Paris 1 Panthéon-Sorbonne seminar for helpful comments.

4.1 Introduction

Firms are used to cope, almost everyday, with one or several news concerning their social responsibility and managers can no longer ignore their impact on firm value. Certainly, the debate on corporate social responsibility (CSR) and what should be the firm's objective(s) is not settled [1]: Should firms maximize profits for the sole benefit of the shareholders or should they take the interest of all stakeholders into account? There are still lively controversies on this question [2], but whatever the answer, empirical evidence suggest that environmental, social or corporate governance concerns - the so-called ESG factors - may impact firm value. One remaining question is the extent of this impact.

Recent history provides many instances where bad corporate social responsibility causes huge economic and financial losses. Consider for instance the Deepwater Horizon oil spill in April 2010: three months after the disaster, BP had lost half its share value, which represents tens of billions dollars. Some even reported that, given the size of the company, the oil spill impacted the UK economy as a whole. The Fukushima Daiichi nuclear disaster in March 2011 is also a dramatic example. Admittedly, the accident is the direct consequence of the Tohoku earthquake and tsunami, but the extent of the accident is, at least partly, related to governance failures by TEPCO. [3]

Beyond anecdotal evidence, several academic papers aimed at assessing the shareholders reaction to various types of events that were harmful to the environment. Most of them focused on public environmental disclosure programs -mainly the US Toxic Release Inventory (e.g. Hamilton, 1995)-, judicial actions following environmental violations (e.g. Karpoff, Lott and Wehrly, 2005), or industrial accidents causing ecological damages (e.g. Capelle-Blancard and Laguna, 2010). Some academic papers also consider the impact of "bad" social or corporate governance

1. Portney (2008), for instance, define CSR as "a consistent pattern of private firms doing more than they are required to do under applicable laws and regulations governing the environment, worker safety and health, and investments in the communities they work".

2. The traditional view (Friedman, 1970; Jensen, 2002) consider that firms which set extra-economic objectives, necessarily have to choose between public benefits and private costs. But this view has been gradually challenged since the 1980s. Recently, for instance, Porter and Kramer (2011) strongly advocate in favor of what they called the "creation of shared value", by opposition with the "creation of shareholder value".

3. See Daniel Kaufmann and Veronika Penciakova, "Japan's triple disaster: Governance and the earthquake, tsunami and nuclear crises", Brookings Institution, 17 March 2011.

practices on firms' market value. This includes a very diverse set of event announcements: product recalls (e.g. Jarrell and Peltzman, 1985), airline crashes (e.g. Borenstein and Zimmerman, 1988), product tampering (Mitchell, 1989), corporate fraud (e.g. Karpoff and Lott, 1993), "unethical behavior" (Gunthorpe, 1997) or massive layoffs (e.g. Farber and Hallock, 2009). These studies provided salient results and showed, overall, that the market penalty may go beyond the direct cost for the company, although apparently without providing sufficient incentives for firm managers to behave differently.

A common limit of the previous papers, however, is that they focus on extreme events. Oil spills, accidents, toxic release, product tampering, corporate fraud, etc. have a significant negative impact: this is a well established fact. But what about less dramatic "everyday" events? How shareholders react to very ordinary events? These questions are important since CSR does not consist merely in avoiding ecological disasters. Instead, according to its proponents, CSR should be embedded in all corporate operations. Further, all previous studies focus on few industries (particularly the petrochemical firms) which are prone to extreme events. On the contrary, the stock market impact of CSR in the services, the NICT, etc. is completely ignored, whereas these industries may represent a large part of the economic activity.

The impact of ESG news on firm value has never been examined on a day-to-day basis.[4] The paper that comes the closest is Klassen and McLaughlin (1996). In their seminal study, they consider companies listed on the Nyse or the Amex over the period 1985-1991 and examine 22 negative events (oil spill, gas leak, explosion and other incidental pollution) and 140 positive events (environmental awards) extracted from the Nexis database. On average, negative events yield to significant abnormal returns of -1.5% ($80 millions), whereas positive events lead to significant abnormal returns of 0.82% ($390 millions).

These results are quite appealing and raise many questions, but the main problem to ex-

4. Corporate social responsibility (CSR) has been the subject of a very large number of papers and among all of them, the link between CSP (corporate social performance) and CFP (corporate financial performance) is, by far, the most popular question. Scholtens (2008) indicates that the causal variable is more likely to be the CFP than the CSP. Still, this issue remains inconclusive (see Orlitsky et al. (2003), Margolis, Elfenbein and Walsh (2008) or Allouche and Laroche (2009) for meta-analysis of the correlation between environmental, social and financial performances).

amine further the relationship between ESG factors and corporate financial performance is the small size of the samples. Consequently, most of the papers simply assess the market reaction following a specific event, but can not provide much detail. Very few papers provide evidence concerning the determinants of the reaction, nor provide any comparison. In the present paper, we attempt to overcome those problems by using a very large and detailed first-hand database.

This paper presents the first large-scale empirical evidence of the impact of ESG news on firm value. Previous studies relied on hand collection and coding of news content. Therefore, they have been restricted to small numbers of events. In this study, we investigate the stock market's reaction to 75,218 ESG events from 2002 to 2008 concerning 100 multinational listed firms amongst the world's largest ones. To that purpose, we use an original dataset provided by Covalence SA, a Geneva-based firm specialized in ethical quotation. The large number of news allows us to perform a robust event study. The Covalence classification is used to build a range of variables of interest, such as the type, the source or the region of occurrence of a news. First, we globally examine the impact of positive and negative news on the stock market and their consequences on the shareholders' gains or losses. Then, we try to determine the drivers of the abnormal returns. Thanks to the high number of events and several variables of control and interest, we are able to implement regressions which aim to find out which features have a significant impact on the ESG-CFP correlation.

Our results show that firms coping with ESG negative events experience a significant drop in their market value. On average, in our sample, the decrease is of 0.1% on a window of three days around the announcement day, which represents an average loss of $10 millions for the shareholders. On the contrary, companies coping with positive events do not experience a significant change in their market value. Our results also suggest that market participants only react to external sources of information. In other words, investors do not seem to be fooled by the efforts of companies to appear at their best. We then point out that some features of an event influence the extent of the shareholders losses. The goodwill hypothesis is verified for the companies ESG reputation. Geographical parameters and lexical content types of CSR disclosures also play a significant role in CSR events impact.

The reminder of the paper is organized as follows. Section 2 describes the data and the variables. The event study methodology and global results are discussed in Section 3. Cross-section analysis of the cumulative abnormal returns is implemented in Section 4. Section 5 concludes.

4.2 The Impact of ESG News on Firm Value: Theoretical Foundations and Hypotheses

It is virtually impossible to open the business section of the New York Times, the Wall Street Journal, The Economist, or any business publication today without seeing mention of measures being taken by some company to become more "socially responsible". - Paul R. Portney (2008)

In the media, stories about CSR have become very frequent over the past decade. This statement is confirmed by Figure 1.1 which report the number of occurrences for the wording "corporate social responsibility" in the newspapers. The query is based on online archive collections provided by Dow Jones Factiva (it covers all major newspapers and publications in the world; that is, more than 10,000 news sources including major publications such as *The Wall Street Journal*, *The Financial Times*, etc.). Both in absolute terms (the raw number of occurrences) and in relative terms (as a percentage of the number of articles which mentioned the word "finance"), the occurrence of the CSR concept is growing very quickly, and now it is quite common.

Three explanations, at least, can be provided for such extensive media coverage. First, ESG news are newsworthy. Information on CSR is likely to make good stories, which may explain that the media are very fond. Indeed, it is reasonable to consider that soft news on ESG issues, and the emotive language associated, are more appealing for a large audience than hard information on company's financial statements for instance. Second, ESG news are "blue-compatible". Empirical evidence suggests that Democrats (the "blues"), in contrast to Republicans ("the reds") are more apt to support causes such as environmental and labor protection and they are more supportive

of the stakeholder theory.[5] Moreover, news media seems to be biased towards liberal ideas[6]. All together, this is consistent with the heavy weight news media give to ESG issues. Third, ESG news are simply increasingly popular (at least in the richest countries): media interest for CSR reflects also the public opinion.

4.2.1 Does it pay to be good?

The fact that ESG news are more and more frequent does not means that they have a significant impact on firms' market value. Being a media hype is neither a necessary nor a sufficient condition for being a market mover. ESG news are often considered as soft news. This is a clear advantage to attract media attention and readers, but at the same time, it is somehow a drawback from the investors point of view because soft news are more difficult to process. That is, we test first a general but fundamental hypothesis:

H_1 : ESG news have a significant effect on firms' market value.

4.2.2 The carrot or the stick?

Our second hypothesis is related to the (a)symmetry of the impact of ESG news. Historically, investor awareness on ESG issues resulted in the rejection of "sin stocks". Practices have evolved and nowadays socially responsible investors used generally both negative and positive screens. Still, the punishment seems intuitively more powerful and prevalent than the reward. Besides, as we will see in the section devoted to the presentation of the database below, journalists are more prone to denounce corporate irresponsibility than to report environmental awards. So, does it pay less to be good than it cost to be bad? According to previous studies, it is reasonable to assume that negative news have more impact than positive ones. For instance, Klassen and McLaughlin (1996) find that positive stock returns after positive news are smaller than negative stock returns after negative news. Similarly, Krueger (2009) finds that negative ESG events are followed by a stock price decrease, while positive ESG events are not significantly affect.

H_2 : Negative ESG news impact more firms' market value than positive ESG news.

5. Hong and Kostovetsky (2010) find that mutual fund managers who make campaign donations to Democrats hold less of their portfolios in industries that are deemed socially irresponsible (based on KLD ratings).

6. See Groseclose and Milyo (2005) for empirical evidence from the US.

4.2.3 PR *versus* CSR

To cope with increasing ESG concerns, companies have adapted their communications strategy. In particular, they disclose more and more information concerning their social responsibility. Obviously, it raises the question of the relevance of such news disclosures in a context of informational asymmetries. In one hand, companies have a clear informational advantage but, on the other hand, the credibility of firms' announcements is low given that they have an interest to distort information to their own benefit.

As introduced in chapter 2, ESG information could be used by firms to fool their clients and stakeholders to green their image. But none of them examine whether such strategies are successful: is greenwashing able to manipulate the shareholders? We attempt to provide insights on this issue by testing whether the impact of ESG news vary according to the source. According to the literature on greenwashing, we expect that external sources disclosures (news published by the media or NGOs) have more impact than internal sources disclosures (news published by the companies themselves).

> H_3 : ESG news from external sources impact more firms' market value than ESG news from the firms themselves.

4.2.4 Reputation: A reservoir of goodwill?

The theoretical literature concerning the effect of the firms' reputation on their performance is somewhat unconclusive. On one hand, Jones, Jones and Little (2000) and Werther and Chandler (2005) argue that CSR may serve as a "reservoir of goodwill" in times of crisis. Accordingly, we can expect that firms with good reputation experience a lower decrease of their market value after the disclosure of negative ESG news. One the other hand, Baron and Diermeier (2007) and Baron (2009) state that companies with highly visible CSR activities face increased public scrutiny, and may experienced a "boomerang effect" in case of disappointment. Similarly, Lyon and Maxwell (2011) consider that *"although companies naturally want to publicize their environmentally-friendly actions, they are often surprisingly hesitant to promote their environmental successes or to issue detailed environmental reports. Part of the reason appears to be that activists react more angrily to firms that lay claim to being virtuous, and then are discovered to*

have feet of clay, than to firms that never make such claims". This is empirically confirm by Luo, Meier and Oberholzer-Gee (2010). While BP is regarded as the "greenest" company in the oil industry, and Exxon as the "brownest", BP accidents are more likely to be reported and Exxon accidents are less likely to be covered.

Moreover, it should be paid attention to the way the reputation is defined. Rennings et al. (2007) point out that results may significantly differ depending on whether firm's reputation is computed in respect with their industry peers or not. Empirically, they found that only the firm's absolute reputation has a significant impact on shareholder wealth.

After testing the hypothesis of a difference between environmental, social and governance events, we test the difference of impact between the ESG issues. Does the social reputation matters more ? We found no evidence for such hypothesis. But, to go further this question, we also test if the reputation on the ESG criterion related to an event matters more than the reputation on the other criteria. For example, does the environmental reputation influence more the shareholders losses than the social or governance reputation after a high polluting emissions announce?

In the continuity of the response to the question "does one size fit all?", we raise the question of the fungibility of the reputation between the ESG criteria. Do the reputation on the most important ESG criterion (like governance for banks) matters more than reputation on the two others criteria ? Does this distinction contribute to the debate "goodwil" versus "boomerang" effect?

H_{4a} : The impact of negative ESG news is lower for a firm with a good "absolute" ESG reputation (independently of its industry).

H_{4b} : The impact of negative ESG news is lower for a firm with a good "relative" ESG reputation (by comparison with industry peers).

H_{4c} : The impact of a good reputation on a ESG criterion on the impact of negative ESG news depends on if this ESG criterion represent a particular concern for the firm's sector.

H_{4d} : The impact of a good reputation on a ESG criterion on the impact of negative

ESG news depends on the event's ESG criterion.

4.2.5 Out of sight, out of mind?

Tavares (2003) show that the amount of foreign aid is decreasing with the geographical and cultural distance between giving and receiving countries. Accordingly, we want to see if the proximity between the company and the country where the ESG news take place, influence the ESG-CFP correlation. Engelberg and Parsons (2011) show also that the impact of media on financial markets is influenced by the distance, for earning announcements in the United States.

H_5 : The impact of ESG news on firms' market value is higher when the event is local (the event involves the community).

4.2.6 "Watch your words, for they become actions."

We aim to design characteristic trends in the content of the negative media articles. Using the titles of the information included in the Covalence Ethicalquote database, we construct lexical variables for the ten categories coming from the General Inquirer dictionaries including notably the Harvard IV-4 dictionary and the Lasswell value dictionary. We focus here on four categories : economic, legal, qualitative and quantitative and use positive, negative, active, communication, and abstract categories as control variables. Content analysis is "a research technique for the objective, systematic and quantitative description of the manifest content of communication" (Berelson, 1952). Broadly used in medical or political research (see for example, Robertson, 1976), this technique allows us to test if the articles' lexical content matter for the impact of ESG events.

H_{6a} : The impact of ESG news on firms' market value is higher when the article contains words referencing to an economic, legal or quantitative orientation. H_{6b} : The impact of ESG news on firms' market value is lower when the article contains words referencing to an abstract, qualitative orientation, or communication issues.

4.2.7 "Head in the oven, feet in the fridge?"

Firms do not may pay the same attention to each E, S or G criterion because they have particular sectoral characteristics. Environment is a particular concern for a basic resources company but less for a bank for example. As developed in Capelle-Blancard and Petit (2013), the companies ESG ratings should be weighted relatively to each ESG criterion importance for the sectors. In the continuity of the previous paper, we want to test the importance of the ESG sectoral particular concerns on the shareholders losses occurring after negative ESG news.

H_7 : The impact of negative ESG news is higher if the ESG criterion represent a particular concern for the firm's sector.

4.2.8 Emphasized attention.

The question of the emphasized, or in contrary of the limited attention [7], of shareholders is an interesting topic. An increased attention on a given company could increase the impact of an ESG event on the stock markets. We use data from Google insights for search as proxy variable for this emphasized attention. This advanced version of Google trends, references the keywords entered by the users for their web searches on Google, scaled by their time-series average and by the total search traffic, to take into account the variation of the attention of the Google users [8]. Dzielinski (2010) highlights that previous literature on that subject found that Google insights for search has a significant interest for predicting sales (Choi and Varian (2009a)), jobless claims (Choi and Varian (2009b)), flu outbreaks (Dukic et al. (2009)), private investor demand and IPO returns (Da et al. (2009)). Google insights for search seems to capture public attention (Da, Engelberg, Gao 2009). Then, "[Google insights for search index] is likely to capture the attention of [...] naive individual investors" (ibid). We have weekly data on the period 2004-2010. We look at the variations of relevant keywords related to each company. As there is a correlation between Covalence Ethicalquote data and Google trends data, we choose to focus mainly on an

7. See Laguna (2008) for more details on limited attention.

8. Internet penetration in developed countries now exceeds 75% of households according to www.internetworldstats.com. 80% of them used a search engine in 2004 and 90% in 2006 (Shangaï iResearch (2006)). Google has the highest search engines market share around the world : in 2004, it was 56,4% (OneStat (2004)) and in 2009, it rose to 67,5% (ComScore (2009)).

exogenous factor, the economic crisis trend.

4.3 Data on ESG news

4.3.1 Covalence

The potential number of ESG news disclosed on public firms is huge: dozens are published almost every day for each firms, whether by medias, NGOs, consultants or the firms themselves. Therefore, in order to assess the financial impact of these information we need a very large database. Furthermore, each piece of news should be sufficiently comprehensive and precise to analyse what drive the market reaction.

Most of the time, to conduct an event study academics compose their database by collecting events from newspapers archives. In recent years, online search engines has facilitated this collect. Still, there is a huge amount of work to process the events which usually limits the size of the database. Thus, until now, academic studies that examine ESG events consider, at best, hundreds of events.

In this study we use an original database provided by Covalence SA. Created in 2001 in Geneva (Switzerland), Covalence has developed, in partnership with Datadoxa, a systematic collect of positive and negative ESG information concerning the world's largest companies. The range of ESG news is actually very broad.[9] Positive news include, for instance, announcement of a social sponsoring program, the launch of new eco-innovative product, a green award, etc. Negative news goes from toxic release disclosure to rumors of downsizing, through the disclosure of bad labor practices in subcontractor factories...

According to the firm, each day 20 analysts perform a total of 80 hours of reading, screening 2,000 news items (in English, Spanish, German and French). As of 2010, their database includes more than 190,000 information items from more than 10,000 sources, covering a universe of more

9. See Appendix A for some examples of ESG news collected by Covalence.

than 500 companies. Covalence uses its database to feed its ethical reputation scoring system, called *EthicalQuote*. For each firm, the score is computed by aggregating positive and negative ethical news. Then, the scores, the rankings and some specific reports are sold to various agents like banks (Barclays, BNP Paribas, HSBC, ...), companies (Coca-Cola, HP, Nokia, ...) and NGOs (Gain, MSF, WWF, ...). The main advantage of this database is its comprehensiveness. Moreover, contrary to sustainability ratings, the information is first-hand.

4.3.2 The sample

Covalence provides us a sample of 126,365 ESG news items from January 2002 to December 2010. These news involve 100 listed firms which belong to the Dow Jones Sector Titans indexes. [10] Some news items are actually related to the same event, occurred on non-business days, or are poorly specified (either the nature the event or the source of the news is missing). Consequently, these news are dropped: this leaves 65,881 events. Moreover, several news may occur for the same firm on the same day, making impossible any interpretation of the market reaction. These news are dropped leaving a total of 31,537 ESG news, positive or negative.

For each news, we know the name of the firm, the announcement date, and the source. Covalence sets apart ESG news into a large number of different sources that we aggregate into three categories. We consider that ESG news may comes from: (i) media (including internet) and official authorities (governmental bodies, academics, international organizations), (ii) NGOs and trade unions, or (iii) the firms themselves. Moreover, Covalence classifies the news into 45 criteria depending on the topic considered. [11] We group them into three broad criteria: (i) environment, (ii) social and (iii) governance. Table 1 reports the number of positive and negative news for each of the nine categories: source $\times$ topic. Note that some news have been published by more than one source (for instance, by *both* a newspaper and a NGO), and/or are related to several ESG issues; consequently the total number of news is lower than the sum of the categories.

This first table gives us some interesting insights. First, the main provider of ESG news is the media which disclose about 84 percent of the news, firms and NGOs equally sharing the

10. See Appendix B for the list of the firms.
11. See Appendix C for a detailed description of the Covalence criteria.

Table 4.1: **Number of ESG news by category.**

This table documents the number of negative and positive ESG news included in the sample, breakdown by source (the firms, the medias, the NGOs) and topic (environment, social and governance). One hundred firms are considered (see the list in Appendix) over the period 2002-2010. Given that some news have been published by several sources and/or are related to several ESG issues, the total number of news is lower than the sum of the categories.

	All		**Firm**		**Media**		**NGO**	
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
Environment	8,079	2,283	810	30	6,976	1,780	341	474
Social	9,311	5,106	1,328	85	7,457	4,301	551	735
Governance	7,625	4,978	915	69	6,420	4,043	319	887
Total	21,233	10,304	2,577	159	17,729	8,547	1,026	1,632

remaining. Moreover, the proportion of news by source is approximately the same, whether ones considers environmental, social or corporate governance issues. Second, our sample of news is well-balanced in terms of ESG criteria even if there are slightly more news related to social issues (39% overall), than news on corporate governance (34%) and the environment (29%). Third, the part of "good" news relative to "bad" ones is very skewed. The total number of positive news is two times larger than the total number of negative news. More precisely, the ratio of positive to negative news is 3.1 for environmental news, 1.8 for social issues and 1.5 for corporate governance. Unsurprisingly, firms are the most prone to announce good news: positive news announced by the firms themselves are sixteen-fold larger than negative news! ESG news from media are also biased towards positive news with a ratio slightly below two. On the contrary, NGOs disclose almost fifty percent more negative than positive ESG news.

4.4 Equity returns variations following an event

4.4.1 The event study methodology

Event studies are widely used to measure the shareholders reactions to all kind of unexpected news.[12], and several of them concern the measure of the impact of social or environ-

12. Kothari and Warner (2005) listed more than 565 event studies published between 1974 and 2000 in the 5 leading finance journals; see also Backmann (2001).

mental events [13]. The subjacent hypothesis of event studies is the informational efficient market hypothesis (a minima semi-strong if we only consider public information). Under this hypothesis, we consider that the shareholders can anticipate the discounted value of current and future firm performance so that stock price changes entirely and directly reflect the impact of the new available information.

The observed stock returns in a given time window around an event (often including one day before to catch possible insiders information, the day of the event and possibly several days after), called normal return, is compared to a predictive return calculated with a regression of the observed firm's returns on specified parameters (which could differ between event studies) on an estimation window. The difference between normal return and predictive return is called the abnormal return. The estimation period is generally preceding the considered event. The event periods should not be overlapping to avoid a clustering problem. Indeed, Brown and Warner (1980, 1985) found that overlapping event periods could imply distortions for AR in mean and in variance because AR are simultaneously correlated. In this case, the null hypothesis of zero mean effect is too often rejected (Boehmer, Musumeci, and Poulsen, 1991).

In order to examine stock returns variations following an event, we use in this paper a multifactorial model as defined by MacKinlay (1997), smooth variation of the standard daily event study market model developed by Fama, Fisher, Jensen and Roll (1969). We assume that the equity return's variation on the event window of a particular event is entirely due to this event and so is an unbiased estimate of those consequences. In fact, the high number of events allows us to consider that all other distortion factors have in mean no effect.

In the multifactorial model we use, the normal relation between the observed returns of a given stock i at time t $R_{i,t}$, the market returns at the same time $R_{m,t}$ and the sector returns at the same time $R_{s,t}$ is supposed to be :

13. see Capelle-Blancard and Laguna (2010) for a survey on the impact of environmental events on firms market value.

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \gamma_i R_{s,t} + \varepsilon_{i,t} \tag{4.1}$$

The terms $\beta_i R_{m,t}$ and $\gamma_i R_{s,t}$ are the portions of the return to security i on day t that are respectively due to marketwide and sectorwide factors [14]. The parameter α_i measures that section of the average daily return on the stock that is neither due to market nor sector movements. Lastly, $\varepsilon_{i,t}$ is the error term. An OLS estimation through an estimation window [-65 ; -5] prior to a given event is implemented to define $\widehat{\alpha_i}$, $\widehat{\beta_i}$ and $\widehat{\gamma_i}$, estimates of α_i, β_i and γ_i. For each day of the event window, defined as [t-1 ;t+1] relative to the event day, an abnormal return $AR_{i,t}$ is calculated as follows :

$$AR_{i,t} = R_{i,t} - \widehat{\alpha_i} - \widehat{\beta_i} R_{m,t} - \widehat{\gamma_i} R_{s,t} \tag{4.2}$$

To look at the total return change , we build the cumulative abnormal returns, CAR_t, defined as the sum of AR included in the event period (for example [-1;+1] in this article) :

$$CAR_{i,[t-1;t+1]} = \sum_{\tau=t-1}^{t+1} AR_{i,\tau} \tag{4.3}$$

For a large enough estimation period, we can consider that the variance of CAR is the sum of the variances of AR, which is expected to be constant on the event window.

$$\sigma^2(CAR_i) = 3\sigma^2(AR_i) \tag{4.4}$$

We then calculate their *t-statistic* and aggregate these abnormal returns calculating their average for all events in the considered sample(s). The sum of the individual AR *t-statistics* follows a distribution that is asymptotically normal with mean zero and variance equal to the number of observations. The *z-statistic* for the average is then the sum of the individual *t-statistics* divided by the square root of the number of observations.

14. for each security, we use respectively one of the most important index of the main place where it is listed and a Standard's and Poors 400 sectoral index to define $R_{m,t}$ and $R_{s,t}$

Stock market data are from Datastream, which covers more than 75% of publicly listed companies in the world. These firms are listed on the stock markets of twelve developed countries (Austria, Canada, France, Finland, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom and the United States) and one emerging country (South Korea). We use representative indexes of the main places where these companies are listed and sectoral indexes (Standard's and Poors 400) to compute abnormal returns.

4.4.2 Results on the CSP-CFP correlation

Because most of the literature on the subject emphasize the asymmetry between positive and negative information, we choose to distinguish systematically negative and positive ESG news, as well as internal (firm), media, NGO disclosures. Table 3 reports average abnormal returns (AAR) and cumulative average abnormal returns ($CAAR_{[-1;+1]}$) in %.

Table 4.2: **ESG events impact on financial performance.**

This table presents the average change in market value following ESG news. AAR_0 is the average abnormal returns the day of the announcement and $CAAR_{[-1;+1]}$ is the cumulative average abnormal returns over the three days around the announcement date. The estimation period is [-65,-5].

	All		**Firm**		**Media**		**NGO**	
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
AAR_0	-.0009	-.021	.001	-.166	-.00007	-.025	-.020	.007
(s.d.)	(.010)	(.016)	(.027)	(.175)	(.011)	(.018)	(.044)	(.036)
$CAAR_{[-1;+1]}$	-.014	-.111**	-.081	-.150	.007	-.150**	-.005	.073
(s.d.)	(.035)	(.052)	(.097)	(.471)	(.039)	(.060)	(.141)	(.109)
Obs.	23142	11422	2715	169	19112	9196	1082	1718

*,**,*** indicate statistical significance at the 10%, 5%, 1% level respectively.

The stick is more effective than the carrot. The first main result of table 3 confirm the asymmetry between positive and negative events' impact. Negative ones have a negative impact on stock markets whereas positives do not present any significant result. Companies facing positive events, disclosed either by internal or external sources, are globally neither upgraded nor downgraded by the markets. This asymmetric result is consistent with most of the previous literature on that subject. Then, we look deeper at this result, separating between the different sources of announces.

Negative events disclosed by the media have a significant impact on CFP. The corresponding average relative loss for shareholders compared to normal returns is approximately comprised between 0.1% and 0.2% for the three days event period. It therefore seems that media's denunciations of companies' bad ESG practices have a direct impact on financial markets that goes on the "right" direction. As Winston Churchill said, "Criticism may not be agreeable, but it is necessary. It fulfils the same function as pain in the human body. It calls attention to an unhealthy state of things."

On the contrary, NGO or internal announces do not seem to have a direct impact on the stock markets. Nevertheless the question of indirect impacts of NGO disclosures on the stock markets in focusing the attention of media on ESG events could be an interesting topic for further research, in connection with the question of the strategies of the different actors to influence each others.

Subsequently, we choose to investigate particularly the determinants of the impact of negative events disclosed by the media on the companies' financial performance.

4.5 How to explain the stock market response to ESG information disclosure?

To do so, we regress CAR, with OLS, on several variables, as described in section 2.3, for the negative media sample. We persent here4 the results with company fixed effects for "clean" events, i.e. negative events disclosed at least by the media with only one event by company in a day. Some robustness checks are presented in appendix to enlarge the sample to negative events disclosed at least by the media but without the only one event by company and by day condition (tables 11 and 12) and without company fixed effects to catch the effects of company and the sector reputation on the whole period 2002-2010 (tables 10 and 12). Our main variables of interest are the emphasized attention, the lexical categories, ESG reputation for both companies and sectors, greenwashing, differences between ESG criteria taking into account the sectoral

differences, and geographical proximity. We look at the impacts of these features on the CSR-CFP correlation *ceteris paribus*.

4.5.1 Feature of events

ESG criteria. Covalence classifies the news into 45 criteria which are aggregated into four groups : working conditions, impact of production, impact of product and institutional impact, but we prefer to aggregate the criteria our way and create three groups which are environmental, institutional and social aspects. As several events are classified in two ESG criteria, the dummy variables are equal to one if the event concerns only the given criterion. No particular sign is expected for the dummy variables.

Sectors' ESG main criterion. The studied companies are classified by Covalence into twelve different sectors : Automobiles & Parts, Basic Resources, Chemicals, Energy & Industrial Goods & Services, Fire, Food & Beverages, Health Care, Personal & Household Goods, Oil & Gas, Retail, Technology and Travel & Leisure. These several sectors may have different features and therefore present different types of correlations between events and stock returns. We choose to aggregate these sectors in six wider categories : Banks, Basic Resources, Chemicals (including health care), Consumer goods and services and Industrial goods, and Technology. Hoepner et al., 2010, found that some sectors like health care, industrials, and consumer discretionary sectors, value more ESG information. In this paper, we choose to include company fixed effects to catch hidden idiosyncratic characteristics, so we do not consider sectors as a *per se* variable but we rather focus on the sector ESG characteristics. As developed in an incoming article, the different sectors have different ESG stakes. The environment is the main criterion for the Basic Resources and Chemicals sectors, social aspects are the most important for the Consumer goods and services and Industrial goods sectors, and governance is crucial for Banks and the Technology sector. Environment $\times$ sector particular concern are crossed dummy variables equal to one if the event concerns only this criterion and this criterion is the most important for the company's sector. Herremanns et al. (1993) and Lee and Faff (2009) find that le link between CSR and CFP is more pronounced in socially problematic industries. However, according to Derwall et al. (2005) and Semenova and Hassel (2008) CSR on environment affects less CFP in

environmentally problematic industries than elsewhere. We then expect that social concerns in socially problematic industries will generate more financial losses than environmental concerns in environmentally controverted sectors.

Source : financial and CSR. Covalence distinguishes several types of sources : academics, consultants, enterprises, governments, individuals, international organizations, medias, NGOs, and trade unions. We choose to consider only Internal (from enterprise headquarters), Media and NGO information in the first regressions and only media sources in the following ones. We set apart manually financial and CSR sources to see if these particular types of sources have significantly different impacts.

Time. We expect that the event effects have changed over time (see Takeda and Tomozawa 2005). Therefore, we implement time fixed effects (a dummy variable for each year between 2002 and 2008) in the cross-sectional regressions, mainly as control variables.

Economic crisis. This variable is implicitly a proxy for the limited attention of shareholders. The higher the amount of available information, the lower the attention on a given event [15]

Reputation. We control the impact of a news by the sectors and the firms ESG reputation, measured by the ratio number of positive news / Total number of news on a given time frame. By aggregating positive and negative news, we assume implicitly their fungibility (see chapter 2). To be consistent with the first results on the particular impact of media disclosures, we choose to fund the reputation index only on these media disclosures. We choose to calculate these variables on the year preceding each event and use a six months and a two years time frame for robustness tests. As we want to test simultaneously sectoral and idiosyncratic reputation impact on abnormal returns, a firm reputation is defined in comparison to its sector. On this subject, Ziegler et al. (2007) examined the links between stock variations and the social and environmental ratings of the Sarasin Bank for 300 European companies between 1996 and 2001. They distinguish the average performance of an industry and the relative performance of the

15. We do not have information on the media coverage of a specific information. See Laguna (2008) and Eisensee and Strömberg for more details on limited attention.

firms inside this sector. They found that the average environmental and social performances of an industry have, respectively, a positive and a negative impact on the stock variations of its firms. However, they found that a firm's reputation inside an industry has no significant impact. We expect to find a similar result.

Greenwashing. Greenwashing is defined as "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service" [16]. Lyon and Maxwell (2011) give a more economic definition : "greenwash can be characterized as the selective disclosure of positive information about a company's environmental or social performance, while withholding negative information on these dimensions". Bazilier and Vauday (2009) separate "soft" and "hard" (checkable) information provided by the firms on their CSR. They define "soft" information as "simple communication in CSR reports (the "cues" communication in Dewatripont and Tirole (2005))" and "hard" information as the external certification (the "issue-relevant" communication in Dewatripont and Tirole (2005))". They find that "hard greenwashing" i.e. no CSR but communication on the subject, could be a dominant strategy, if the level of consumers' confidence is high. Defining greenwashing in an empirical work is not trivial. We cannot define greenwashing as Lyon and Maxwell (2011) do, because of the too low number of companies' negative information. The ratio of the reputation given by companies' disclosures on the reputation given by external sources could be interesting to analyse with other data, to see if Lyon and Maxwell (2011) greenwashing has an influence on abnormal stock returns following CSR events. In this study, we choose a definition closer from Bazilier and Vauday (2009), even if "hard" and "soft" information are not so easy to distinguish, we implement a continuous proxy variable to measure it, defined as the percentage of positive ESG news disclosed by companies in the total amount of positive ESG information (disclosed by both enterprises, media or NGOs). As for the reputation, we designed a time frame of one year preceding each event to have an evolving measure compatible with companies' fixed effects.

Lexical characteristics. We wonder if the content of the articles matter. We cross the content of the titles of the Covalence-Ethicalquote database with different categories of the Inquirer

16. See TerraChoice Environmental Marketing Inc., November 2007.

dictionary (including notably the Harvard IV-4 dictionary and the Lasswell value dictionary). For each event, we introduce lexical dummy variables equal to one if one of the articles concerning the event contains at least one word referenced in the following lexical categories :

- Econ@ : 510 words of an economic, commercial, industrial, or business orientation, including roles, collectivities, acts, abstract ideas, and symbols, including references to money. Includes names of common commodities in business.
- Legal : 192 words relating to legal, judicial, or police matters.
- Quality : 344 words indicating qualities or degrees of qualities which can be detected or measured by the human senses. Virtues and vices are separate.
- Quan : 314 words indicating the assessment of quantity, including the use of numbers.

Distance. We implement a first indicator of the distance between the country where the ESG news take place and the firm's country of origin by considering the logarithm of the distance between the two countries[17]. We expect that the distance will have a negative effect while a common language will have a positive effect on the CSR-CFP correlation.

Common Language. We implement also a dummy variable equal to 1 if the country where the ESG news take place and the firm's country of origin have a common official language.We expect that the distance will have a negative effect while a common language will have a positive effect on the ESG-CFP correlation.

Financial control variables. We use different variables to control for financial companies' particularities. The total assets (in logarithm), the Price Earning Ratio, the R&D spendings divided the the total assets and the ratio of floating shares on the total of shares. A priori, two opposite effects could play a role concerning the influence of the total assets of companies on the relations between ESG and financial performance. If investors may be more sensitive to news concerning big enterprises, the shares of small firms are less liquid, and their reallocation possibilities are weaker. That is why we cannot expect a particular sign of this effect on stock variation following an event. According to McWilliams and Siegel (2000), the R&D spendings

17. We use the population-weighted distance in the distance database developed by the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII)

should lower the CSR-CFP correlation, but the availability of the data (moreover only annual) lowers the size of the sample, therefore we do not choose to implement it. These financial control variables are rarely significant, that is why we choose to keep only the total assets.

4.5.2 Results on impact's determinants

"*Goodwill is the one and only asset that competition cannot undersell or destroy.*" Ludwig Borne. The goodwill hypothesis is verified, reputation is a shield against shareholders' additional losses following negative ESG events disclosed by the media. We choose to consider only the reputation made by the media, to be coherent with our first main result. We find a trend where the lower the company ESG reputation on the whole period 2002-2010, the higher the financial losses concerning negative events disclosed by the media. These results tend to validate the goodwill hypothesis where ESG reputation is a kind of insurance in times of ESG troubles. This effect particularly involve the sectoral minor ESG concerns and there the goodwill effect is frontal: the better the reputation on low importance ESG concerns, the lower the losses for negative events on minor issues.

"It is true that you may fool all of the people some of the time; you can even fool some of the people all of the time; but you can't fool all of the people all of the time." Abraham Lincoln. We do not find any clear, robust result for greenwashing on the whole period. "Fooling" does not seem to be efficient in lowering negative ESG news impact on the stock markets. However, the previous chapter proved that firms' disclosures influence their future external disclosures.

"Out of sight, out of mind". This common saying is verified for events occurring in countries with the same official language as the company headquarters country, compared to others. Nevertheless we find no significant and robust result for the geographical distance. The higher the cultural proximity (common language) between the events' occurrence places and the company headquarters, the higher the losses induced for shareholders, following negative media disclosures.

If the impact of each negative ESG event seems to diminish with time, their overall number

Table 4.3: **Impact of negative events disclosed by the media.**

CAR are regressed, with OLS, on several variables for negative news disclosed by the media on [-1,+1] days.
Predicted Returns are calculated on a [-65,-5] days estimation period.
Fixed effects : sector for all columns and company's headquarters country for the 4 first columns.

Concern								
Environment	-.253	-.313	-.189	-.097				
	(.276)	(.225)	(.231)	(.188)				
Social	.060	-.192	.134	.172				
	(.261)	(.220)	(.213)	(.186)				
Governance	.246	.038	.267	.273				
	(.244)	(.198)	(.202)	(.173)				
Sector high importance	.049	.183	-.015	.044				
	(.206)	(.174)	(.161)	(.140)				
Source								
Finance	-.166	-.132	-.085	-.137				
	(.233)	(.196)	(.216)	(.179)				
CSR	.385	.344	.215	.314	.235	.254	.138	.222
	(.240)	(.195)*	(.222)	(.182)*	(.189)	(.160)	(.157)	(.140)
Trend								
Time (month)	-.005	-.005	-.003	-.003	-.009	-.007	-.005	-.002
	(.004)	(.003)*	(.003)	(.003)	(.003)***	(.003)**	(.003)*	(.002)
Economic crisis	-.012	-.001	-.001	.008				
	(.011)	(.009)	(.009)	(.007)				
Content analysis								
Economic	-.166	-.033			-.155	-.036		
	(.100)*	(.089)			(.098)	(.087)		
Legal	-.087	-.096						
	(.203)	(.183)						
Qualitative	.672	.554			.772	.623		
	(.335)**	(.262)**			(.334)**	(.263)**		
Quantitative	-.567	-.507			-.583	-.520		
	(.230)**	(.175)***			(.230)**	(.174)***		
Reputation	1.123	1.007	1.366	1.001	1.401	1.003	1.353	.881
	(.613)*	(.521)*	(.516)***	(.470)**	(.560)**	(.472)**	(.473)***	(.434)**
Greenwashing	.127	.383	.186	.350				
	(.711)	(.585)	(.580)	(.502)				
Geography								
Distance (log)	.035		-.098					
	(.096)		(.068)					
Common language	-.601		-.352		-.335		-.276	
	(.240)**		(.186)*		(.222)		(.179)	
Sector	*(omitted variable : Banks)*							
Basic resources	1.120	.855	.869	.523	.987	.665	.716	.265
	(.552)**	(.437)*	(.441)**	(.372)	(.503)**	(.395)*	(.382)*	(.339)
Chemicals	1.376	1.089	.938	.562	.995	.778	.688	.287
	(.690)**	(.572)*	(.566)*	(.480)	(.560)*	(.456)*	(.429)	(.379)
Consumer goods & services	1.170	.949	.657	.463	.931	.717	.523	.213
	(.545)**	(.446)**	(.447)	(.377)	(.445)**	(.353)**	(.347)	(.302)
Health Care	.717	.668	.331	.190	.629	.545	.322	.037
	(.526)	(.440)	(.428)	(.370)	(.460)	(.372)	(.355)	(.313)
Industrial goods	1.490	1.284	.915	.732	.987	.864	.586	.406
	(.633)**	(.509)**	(.491)*	(.421)*	(.526)*	(.428)**	(.409)	(.359)
Technology	.889	.549	.542	.266	.640	.328	.354	.0009
	(.566)	(.469)	(.461)	(.392)	(.464)	(.383)	(.366)	(.323)
Assets (log)	.034	.035	-.003	.044				
	(.110)	(.093)	(.094)	(.082)				
Observations	4037	5411	6070	8451	4041	5418	6074	8460

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

is growing. We do not find any evidence that limited attention has a significant effect, taking for example into account the economic crisis trend. We do not find overall significant and robust results for the particular types of sources of the news, neither for financial, nor for CSR sources.

However, the lexical content of the articles clearly influence their financial impact. We find that articles' titles including more quantitative words tend to enhance the losses due to negative ESG events, whereas qualitative words lower these losses. Nevertheless, economic or legal vocabulary do no seem to affect the impact of the events related in the articles.

Last but not least result, the ESG factors present a quite different substance, but seemingly similar impacts. The study concludes that no there is no clear difference between information on a major ESG issue for a sector (such as the environment for Basic resources) and others, even if the stronger ESG concern that bring goodwill seems to be the governance (see table 4.7). However, the determinants of the market reaction to these types of information split. Thus, the lexical content strongly influences the impact of negative information on major sectoral issue, but not the reputational effect (see table 4.8). On the other hand, the latter plays a goodwill role on losses concerning minor ESG issues, but only with regard to the reputation on these minor issues (see table 4.9). The goodwill hypothesis is verified only frontally, for negative information on minor ESG concerns. It also appears that the information disclosed by specialized media in CSR have less impact, primarily on these concerns.

On average, negative media information incur losses to shareholders, not the others. A good non-financial reputation, a low cultural proximity and more qualitative than quantitative lexical content lower these losses. The separate analysis of the determinants of these impacts according to the importance of the sector concerned criterion refines these results.

4.6 Conclusion

Investors and analysts have access to more Environmental, Social and Governance (ESG) information than ever before. And whether they like it or not, firms have to take into account the social responsibility of their actions to improve their financial performance.

This paper examines the stock markets reactions to ESG events included in the Covalence-EthicalQuote database which counts, after several filters, more than 75,000 occurrences concerning 100 listed companies on the period 2002-2010. Which means that we do not only consider extreme events but also very ordinary everyday events. Our results first point out that the firms' stock performance reacts negatively and instantaneously to negative ESG information but does not react significantly to positive ESG news. Media disclosures of negative events impact negatively the stock markets, in contrast to internal or NGO negative publications. Shareholders suffer on average from a significant equity loss of about 0.1% on a window of three days around the publication in the media of a negative ESG event.

We then investigate the determinants of the impact of these negative ESG events disclosed by the media. First of all, the better the reputation, particularly for companies inside their sector, the lower the losses. The goodwill hypothesis is verified. Cultural proximity (same official language between the occurrence place of an event and the concerned company's country), and quantitative vocabulary in articles' titles are other sources of additional losses due to negative ESG events, whereas a qualitative vocabulary lower the losses. Finally, the ESG factors and their importance for the sectors' activities do not robustly matter. Nevertheless, governance reputation enhance the goodwill effect. Furthermore, the determinants of stock market reaction to ESG news depend on the sectoral importance of the ESG concern. Major concern news that contain an economic and a quantitative lexicon have more negative impact, as opposed to qualitative lexicon. Minor concern news' impact is lowered with a good reputation on minor issues and if the source of the news is specialized in CSR.

Many directions must be explored to improve this study. We could implement non-linear or more complex approaches for the abnormal returns definition. Media audience data could be interesting to test if the media coverage characteristic matter for the financial losses due to negative ESG events. Yet, we only use dummy variables for financial or CSR newspapers, and the results are not robust enough. We should find a way to use a reliable variable to test its impact properly. Finally, we would deepen the lexical analysis with other categories of interest.

The definition of the ESG companies' reputation is also difficult to measure. Its source (media, firms, NGOs, etc.), its time frame building (one or two years moving average, time cumulative reputation), its cultural differences should further investigated. The weights of small ESG events following big ones (Barnett, working paper) in the fundings of firms' reputation, or a discussion on the definitions of greenwashing (taking into account negative firm information) should also lead to other papers.

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Appendix

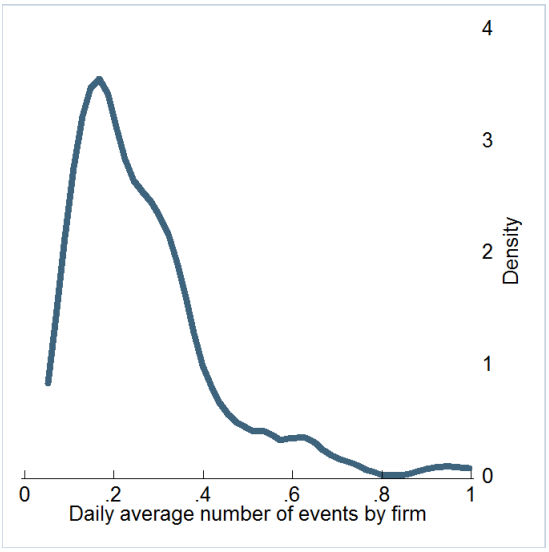

Figure 4.1: **Number of events by firm and by day.**

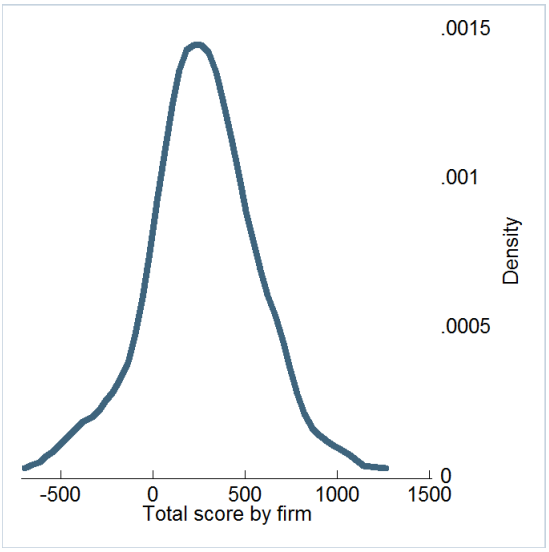

Figure 4.2: **Total score by firm**.

Table 4.4: **List of indexes used in multifactorial regressions.**

Local index	Sectoral index
AEX INDEX (AEX)- PRICE INDEX (U$)	S & P400 AEROSPACE & DEFENCE - PRICE INDEX (U$)
ATX - AUSTRIAN TRADED INDEX - PRICE INDEX (U$)	S & P400 AUTO PARTS & EQUIP - PRICE INDEX (U$)
FRANCE CAC 40 -PRICE INDEX (U$)	S & P400 BANKS - PRICE INDEX (U$)
FTSE 100 - PRICE INDEX (U$)	S & P400 CHEMICALS - PRICE INDEX (U$)
HDAX (XETRA) - PRICE INDEX (U$)	S & P400 ENERGY IG - PRICE INDEX (U$)
KOREA SE COMPOSITE (KOSPI) - PRICE INDEX (U$)	S & P400 FOOD BEV& TOBACCO - PRICE INDEX (U$)
MSCI SWITZERLAND - PRICE INDEX (U$)	S & P400 LEISURE EQUIP & PRODS - PRICE INDEX (U$)
OMX HELSINKI (OMXH) - PRICE INDEX (U$)	S & P400 METALS & MINING - PRICE INDEX (U$)
OMX STOCKHOLM (OMXS) - PRICE INDEX (U$)	S & P400 OIL & GAS EXPLOR & PROD - PRICE INDEX (U$)
OSLO SE OBX - PRICE INDEX (U$)	S & P400 PHARMACEUTICALS - PRICE INDEX (U$)
S & P 500 COMPOSITE - PRICE INDEX COMPOSITE	S & P400 RETAILING - PRICE INDEX (U$)
S & P TSX COMPOSITE INDEX - PRICE INDEX (U$)	S & P400 TECHNOLOGY HWARE & EQUIP - PRICE INDEX (U$)
TOPIX - PRICE INDEX (U$)	

Table 4.5: **ESG events impact on financial performance. Significant AR.**

This table presents the average change in market value following ESG news. AAR_0 is the average abnormal returns the day of the announcement and $CAAR_{[-1;+1]}$ is the cumulative average abnormal returns over the three days around the announcement date. The estimation period is [-65,-5]. Only significant abnormal results at P<1% are considered. Fixed effects : sector for all columns and company's headquarters country for the 4 first columns.

	All		**Firm**		**Media**		**NGO**	
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
$AAR_0^{<1\%}$	1.40e-06	-.024	.002	-.175	.001	-.028	-.023	.007
(s.d.)	(.011)	(.017)	(.029)	(.184)	(.012)	(.019)	(.046)	(.038)
$CAAR_{[-1;+1]}^{<1\%}$	-.024	-.125**	-.109	-.201	-.001	-.163***	-.005	.066
(s.d.)	(.036)	(.054)	(.098)	(.494)	(.040)	(.061)	(.144)	(.112)
Obs.	21926	10826	2592	160	18079	8718	1033	1625

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 4.6: **Impact of negative events disclosed by the media. Significant AR.**

CAR are regressed, with OLS, on several variables for negative news disclosed by the media on [-1,+1] days. Predicted Returns are calculated on a [-65,-5] days estimation period. Only significant abnormal results at P<1% are considered. Fixed effects : sector for all columns and company's headquarters country for the 4 first columns.

Concern								
Environment	-.271	-.336	-.157	-.092				
	(.282)	(.229)	(.237)	(.192)				
Social	.018	-.218	.176	.179				
	(.269)	(.226)	(.218)	(.189)				
Governance	.258	.033	.299	.267				
	(.249)	(.203)	(.207)	(.176)				
Sector high importance	.093	.208	-.012	.058				
	(.212)	(.179)	(.166)	(.144)				
Source								
Finance	-.121	-.105	-.065	-.105				
	(.240)	(.203)	(.223)	(.185)				
CSR	.443	.413	.276	.348	.306	.322	.197	.266
	(.247)*	(.202)**	(.230)	(.188)*	(.195)	(.164)**	(.161)	(.144)*
Trend								
Time (month)	-.004	-.005	-.002	-.001	-.010	-.008	-.004	-.001
	(.004)	(.003)	(.003)	(.003)	(.004)***	(.003)**	(.003)*	(.002)
Friday	.032	.207	.050	.103				
	(.192)	(.172)	(.165)	(.145)				
Economic crisis	-.017	-.006	-.004	.004				
	(.012)	(.010)	(.009)	(.008)				
Content analysis								
Economic	-.154	-.034			-.145	-.038		
	(.104)	(.091)			(.102)	(.090)		
Legal	-.136	-.143						
	(.208)	(.188)						
Qualitative	.662	.544			.779	.620		
	(.348)*	(.272)**			(.347)**	(.272)**		
Quantitative	-.559	-.515			-.585	-.532		
	(.240)**	(.182)***			(.240)**	(.182)***		
smallskip Reputation	1.019	.994	1.436	.895	1.399	1.050	1.450	.830
	(.635)	(.539)*	(.534)***	(.480)*	(.582)**	(.489)**	(.490)***	(.444)*
Greenwashing	-.141	.206	.125	.254				
	(.746)	(.612)	(.605)	(.515)				
Geography								
Distance (log)	.001		-.126					
	(.099)		(.070)*					
Common Language	-.636		-.366		-.410		-.319	
	(.248)**		(.191)*		(.229)*		(.184)*	
Assets (log)	.018	.014	-.018	.033				
	(.113)	(.096)	(.096)	(.084)				
Const.	-1.636	-1.421	-.216	-1.880	-.996	-.919	-1.123	-.692
	(2.456)	(1.976)	(2.081)	(1.718)	(.521)*	(.429)**	(.412)***	(.375)*
Obs.	3839	5145	5766	8010	3843	5152	5770	8019
F statistic	1.66	1.744	1.433	1.071	2.274	2.507	1.457	1.136

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 4.7: **Impact of negative events disclosed by the media. ESG concerns.**

CAR are regressed, with OLS, on several variables for negative news disclosed by the media on [-1,+1] days. Predicted Returns are calculated on a [-65,-5] days estimation period. Fixed effects : sector for all columns and company's headquarters country for the 4 first columns.

Concern								
Environment	-.293	-.278	-.204	-.077				
	(.339)	(.277)	(.294)	(.237)				
Social	-.124	-.365	.067	.078				
	(.329)	(.282)	(.266)	(.238)				
Governance	.239	.026	.313	.288				
	(.266)	(.216)	(.220)	(.189)				
Environment × High	.028	.084	-.051	-.029				
	(.456)	(.389)	(.382)	(.322)				
Social × High	.213	.386	-.002	.136				
	(.398)	(.344)	(.315)	(.280)				
Governance × High	.017	.073	.056	.150				
	(.544)	(.439)	(.420)	(.357)				
Source								
Finance	-.106	-.025	-.078	-.072				
	(.246)	(.204)	(.227)	(.186)				
CSR	.319	.237	.162	.218	.176	.195	.084	.194
	(.247)	(.201)	(.231)	(.186)	(.194)	(.163)	(.160)	(.142)
Trend								
Time (month)	-.006	-.008	-.004	-.004	-.009	-.007	-.004	-.001
	(.004)	(.004)**	(.003)	(.003)	(.003)**	(.003)**	(.003)	(.002)
Economic crisis	-.009	.001	.002	.008				
	(.012)	(.009)	(.009)	(.007)				
Reputation								
Environment	-.701	-.047	-.582	-.204	-.110	.163	-.074	-.057
	(.535)	(.428)	(.439)	(.362)	(.404)	(.338)	(.350)	(.322)
Social	.423	.285	.181	.189	1.067	.739	.692	.567
	(.709)	(.586)	(.594)	(.517)	(.629)*	(.521)	(.519)	(.447)
Governance	.975	.695	1.159	.888	.757	.457	.652	.341
	(.623)	(.516)	(.509)**	(.431)**	(.536)	(.446)	(.443)	(.373)
Greenwashing								
Environment	.310	.412	.315	.346				
	(.596)	(.496)	(.478)	(.403)				
Social	-.549	-.105	-.345	-.073				
	(.758)	(.620)	(.607)	(.511)				
Governance	-.610	-1.084	-.503	-.480				
	(.728)	(.639)*	(.566)	(.501)				
Content analysis								
Economic	-.120	.007			-.139	-.028		
	(.107)	(.094)			(.102)	(.090)		
Legal	-.138	-.132						
	(.220)	(.196)						
Qualitative	.687	.562			.823	.657		
	(.354)*	(.272)**			(.340)**	(.266)**		
Quantitative	-.600	-.522			-.675	-.594		
	(.238)**	(.179)***			(.234)***	(.177)***		
Geography								
Distance (log)	.019		-.089					
	(.103)		(.072)					
Common language	-.672		-.430		-.357		-.291	
	(.258)***		(.196)**		(.226)		(.183)	
Sector				*(omitted variable : Banks)*				
Basic resources	.736	.716	.599	.529	1.023	.786	.755	.300
	(.689)	(.563)	(.545)	(.465)	(.488)**	(.387)**	(.394)*	(.362)
Chemicals	.829	.893	.500	.507	1.058	.911	.749	.344
	(.821)	(.694)	(.664)	(.568)	(.555)*	(.456)**	(.442)*	(.402)
Consumer	.692	.578	.457	.383	.984	.769	.621	.280
goods & services	(.746)	(.613)	(.608)	(.507)	(.451)**	(.362)**	(.359)*	(.315)
Health care	.574	.493	.398	.309	.763	.609	.479	.140
	(.749)	(.619)	(.598)	(.506)	(.480)	(.391)	(.374)	(.326)
Industrial goods	1.301	1.186	.933	.844	1.136	.997	.770	.561
	(.788)*	(.638)*	(.617)	(.515)	(.548)**	(.450)**	(.426)*	(.374)
Technology	.602	.397	.398	.240	.601	.334	.439	.087
	(.613)	(.513)	(.494)	(.421)	(.484)	(.400)	(.386)	(.336)
Assets (log)	-.054	-.030	-.046	.006				
	(.123)	(.103)	(.105)	(.090)				
Observations	3711	4994	5611	7833	3883	5223	5847	8171

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 4.8: **Impact of sectoral high importance negative events disclosed by the media.**

CAR are regressed, with OLS, on several variables for negative news disclosed by the media. Predicted Returns are calculated on a [-65,-5] estimation period. Fixed effects : sector and company's headquarters country.

Concern								
Environment	.105	.146	.136	.370				
	(.520)	(.402)	(.490)	(.365)				
Social	-.175	-.424	.130	.172				
	(.430)	(.364)	(.367)	(.333)				
Governance	.358	.087	.252	.197				
	(.300)	(.247)	(.256)	(.227)				
Source								
Finance	-.016	-.098	.049	-.145				
	(.347)	(.290)	(.309)	(.258)				
CSR	.038	.203	-.046	.200	.064	.170	-.002	.113
	(.347)	(.284)	(.314)	(.257)	(.254)	(.214)	(.211)	(.184)
Trend								
Time (month)	-.003	-.006	-1.00e-05	-.0006	-.005	-.004	.00004	.001
	(.005)	(.004)	(.004)	(.004)	(.004)	(.004)	(.003)	(.003)
Economic crisis	-.004	.008	.0005	.011				
	(.015)	(.012)	(.011)	(.009)				
Reputation								
× Major ESG concern	-.388	-.370	.069	.133	.033	-.083	.287	.336
	(.717)	(.611)	(.629)	(.537)	(.634)	(.538)	(.565)	(.484)
× Minor ESG concern	.018	.300	.008	.263	.497	.506	.299	.494
	(.814)	(.674)	(.644)	(.561)	(.653)	(.542)	(.551)	(.467)
Greenwashing								
× Major ESG concern	.040	-.022	.104	.090				
	(1.000)	(.816)	(.825)	(.677)				
× Minor ESG concern	-1.211	-.755	-1.030	-.404				
	(1.024)	(.876)	(.846)	(.720)				
Lexical content								
Economic	-.292	-.218			-.318	-.243		
	(.156)*	(.133)			(.157)**	(.134)*		
Legal	-.198	-.145						
	(.268)	(.252)						
Qualitative	1.008	.830			1.116	.924		
	(.447)**	(.359)**			(.431)***	(.350)***		
Quantitative	-.593	-.533			-.679	-.587		
	(.300)**	(.233)**			(.297)**	(.234)**		
Geography								
Distance (log)	.059		-.081					
	(.136)		(.096)					
Common language	-.640		-.220		-.160		-.042	
	(.315)**		(.245)		(.268)		(.224)	
Sector								
Basic resources	.045	-.333	-.009	-.412				
	(.881)	(.690)	(.747)	(.602)				
Chemicals	.402	-.200	.306	-.070				
	(1.057)	(.842)	(.909)	(.737)				
Consumer g& s	.837	.564	.390	.216				
	(.830)	(.701)	(.676)	(.602)				
Health Care	.634	.319	.264	-.062				
	(.816)	(.703)	(.659)	(.600)				
Industrial goods	.701	.603	.492	.334				
	(1.033)	(.861)	(.767)	(.717)				
Technology	-.131	-.432	.077	-.071				
	(.746)	(.627)	(.619)	(.534)				
Assets (log)	-.062	-.129	-.039	-.073				
	(.152)	(.128)	(.132)	(.113)				
Obs.	2159	2808	3272	4434	2196	2857	3325	4503

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 4.9: **Impact of sectoral low importance negative events disclosed by the media.**

CAR are regressed, with OLS, on several variables for negative news disclosed by the media. Predicted Returns are calculated on a [-65,-5] estimation period. Fixed effects : sector and company's headquarters country.

Concern								
Environment	-.884	-.617	-.428	-.226				
	(.575)	(.448)	(.453)	(.371)				
Social	-.337	-.439	-.009	.044				
	(.635)	(.512)	(.478)	(.408)				
Governance	-.126	-.178	.243	.302				
	(.605)	(.480)	(.458)	(.387)				
Source								
Finance	-.373	-.155	-.298	-.121				
	(.326)	(.283)	(.315)	(.263)				
CSR	.883	.537	.571	.459	.461	.366	.312	.359
	(.345)**	(.287)*	(.328)*	(.272)*	(.289)	(.245)	(.235)	(.215)*
Trend								
Time (month)	-.006	-.006	-.006	-.006	-.014	-.010	-.009	-.004
	(.005)	(.005)	(.005)	(.005)	(.005)***	(.004)**	(.004)**	(.003)
Economic crisis	-.022	-.011	-.002	.007				
	(.018)	(.015)	(.014)	(.012)				
Reputation								
× Major ESG concern	-.633	-.504	-.212	-.163	-.366	-.377	-.087	-.151
	(.836)	(.713)	(.670)	(.589)	(.696)	(.603)	(.562)	(.503)
× Minor ESG concern	2.521	2.056	2.409	1.298	2.579	1.883	1.994	1.051
	(.940)***	(.799)**	(.768)***	(.706)*	(.820)***	(.693)***	(.668)***	(.628)*
Greenwashing								
× Major ESG concern	.244	.037	.191	-.132				
	(.874)	(.751)	(.677)	(.601)				
× Minor ESG concern	1.389	1.404	1.205	.575				
	(1.166)	(.972)	(.883)	(.772)				
Lexical content								
Economic	-.029	.167			-.022	.153		
	(.123)	(.123)			(.121)	(.116)		
Legal	.095	-.001						
	(.326)	(.271)						
Qualitative	.151	.138			.343	.270		
	(.559)	(.410)			(.544)	(.406)		
Quantitative	-.381	-.390			-.586	-.508		
	(.374)	(.269)			(.380)	(.269)*		
Geography								
Distance (log)	-.045		-.183					
	(.160)		(.107)*					
Common language	-.570		-.530		-.491		-.535	
	(.397)		(.294)*		(.366)		(.287)*	
Sector								
Basic resources	2.296	2.051	1.660	1.009	2.217	1.630	1.432	.530
	(.974)**	(.755)***	(.734)**	(.623)	(.895)**	(.666)**	(.635)**	(.557)
Chemicals	2.458	2.373	1.307	.696	2.206	1.715	1.185	.162
	(1.191)**	(.961)**	(.906)	(.761)	(.981)**	(.767)**	(.692)*	(.612)
Consumer g& s	1.967	1.799	1.036	.547	1.755	1.294	.908	.092
	(1.025)*	(.823)**	(.810)	(.680)	(.790)**	(.610)**	(.580)	(.503)
Health Care	1.292	1.710	.488	.510	1.468	1.469	.639	.190
	(.982)	(.818)**	(.774)	(.669)	(.827)*	(.657)**	(.595)	(.530)
Industrial goods	2.809	2.477	1.624	1.149	1.812	1.582	.986	.428
	(.979)***	(.791)***	(.792)**	(.648)*	(.789)**	(.630)**	(.614)	(.532)
Technology	2.242	1.753	1.178	.589	1.343	.867	.622	-.152
	(.925)**	(.755)**	(.724)	(.611)	(.818)	(.667)	(.600)	(.528)
Assets (log)	.024	.147	-.015	.154				
	(.185)	(.154)	(.150)	(.129)				
Obs.	1741	2427	2615	3773	1822	2529	2721	3914

Robust standard errors are reported in parentheses. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

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Résumé

Cette thèse examine la Responsabilité Sociale de l'Entreprise (RSE), précise ses enjeux, étudie les stratégies de communication de ses acteurs et détermine les conditions de l'impact financier des informations Environnementales, Sociales et de Gouvernance d'entreprise (ESG). Le premier chapitre discute des théories du bienfondé de la RSE puis présente plusieurs faits stylisés sur ses sources, sa localisation, son lexique et son évolution temporelle. Le deuxième chapitre propose une nouvelle grille de notation de la performance extra-financière des entreprises, tenant compte de spécificités sectorielles. Ainsi, l'environnement y est plus fortement pondéré pour les entreprises pétrolières que pour les banques, où la gouvernance est l'enjeu principal. Le troisième chapitre analyse les stratégies de communication RSE des entreprises, des médias et des ONGs. Lorsqu'elles sont critiquées par des sources externes sur l'un des critères ESG, les entreprises font profil-bas sur ce critère et contre-attaquent en divulguant plus d'informations sur les autres critères. Au sein d'un secteur, les firmes sont moutonnières sur leur critère ESG majeur ; tandis qu'on observe des comportements de passager clandestin sur les critères mineurs. A double-tranchant, leur communication sur leur critère majeur a un effet positif sur leurs relations publiques, mais les expose aussi aux attaques externes. Le dernier chapitre examine l'impact des divulgations d'informations ESG sur la rentabilité des firmes. Globalement, seules les informations négatives divulguées par les médias ont un impact significatif à court terme, négatif. La carotte est donc mieux répercutée que le bâton et les annonces des firmes et des ONGs ne sont pas sources de rentabilités anormales. La réputation ESG des entreprises dans les médias est un bouclier de bienvaillance contre les pertes liées aux évènements ESG négatifs. La proximité linguistique et le lexique des titres des annonces modulent également leur impact.

Discipline: Économie

Mots-clefs: Responsabilité Sociale de l'Entreprise, Environnement, Social, Gouvernance, notation extra-financière, stratégie de communication, étude d'évènements, Investissement Socialement Responsable.

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Corporate Social Responsibility: Stakes, strategies, impacts

Abstract

This thesis investigates Corporate Social Responsibility (CSR), specifies its stakes, examines the communication strategies of its actors and determines the conditions of the financial impact of Environmental, Social and corporate Governance (ESG) news. The first chapter discusses the CSR theories and provides several stylized facts about its sources, its location, its lexicon and its temporal evolution. The second chapter proposes a new grid of extra-financial business rating, taking into account sectorial specificities. Thus, environment is more heavily weighted for oil companies than banks, where governance is the main issue. The third chapter analyzes the CSR communication strategies of firms, media and NGOs. When criticized by external sources on one ESG concern, companies adopt a low-profile on this criterion and counter-attack by disclosing more information on the other criteria. Within a sector, firms are sheeplike on their ESG major concerns; while they adopt free-riding behaviors on the minor criteria. Double-edged, firms' disclosures on major concerns have a positive effect on their public relations, but also expose them to external attacks. The final chapter examines the impact of ESG information disclosure on the financial profitability of firms. Overall, only negative information disclosed by the media have a significant negative impact in the short run. The carrot is better reflected than the stick and the announcements of firms and NGOs are not a source of abnormal returns. The firms' ESG reputation in the media is a goodwill shield against the losses following negative ESG events. Linguistic proximity and the lexicon of announces' titles also modulate their impact.

Area: Economics

Keywords: Corporate Social Responsibility, Environment, Social, Governance, extra-financial rating, Communication Strategy, Events' Study, Socially Responsible Investment.

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